ORDER NO. VRD9405M113

Service Manual

General Description
Adjustment Procedures
Schematic Diagrams
Exploded Views/Parts List

Video Cassette Recorder
Panasonic VHS HQ
PAL

NV-SD22EG EO

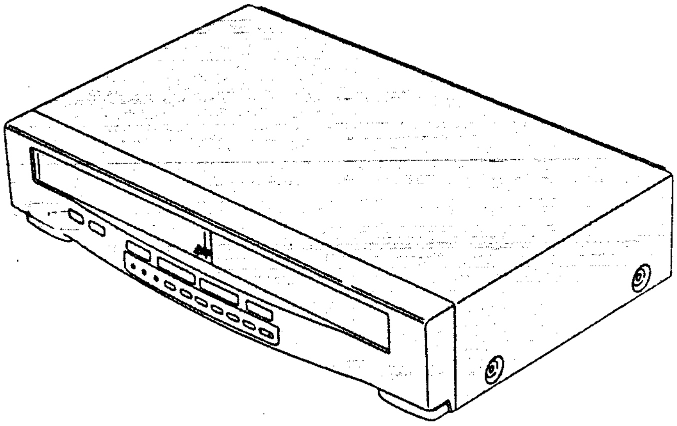
NV-SD25EG EO B

PDC Decoder

VW-PDC1E

K-MECHANISM

EINGEGANGEN 21. Jan. 1995



SPECIFICATIONS

ITEM	SPECIFICATION		
POWER	SOURCE: 220~240 V 50/60 Hz		
	CONSUMPTION: 21 watts		
RECORDING SYSTEM	2 rotary heads, helical scanning system		
	PAL		
TV TUNER SYSTEM	NV-SD22EG NV-SD25EG	VHF I:	CHE2~CHE4 (PAL-B)
		VHF III:	CHE5~CHE12
		VHF H:	CHS4~CHS41 75Ω unbalanced
		UHF:	CHE21~CHE69 (PAL-G) 75Ω unbalanced
	NV-SD25B	UHF:	CH21~CH69 (PAL I) 75Ω unbalanced
	NV-SD22EO NV-SD25EO	VHF I:	CHE2~CHE4 (PAL-B)
		VHF III:	CHE5~CHE12
		VHF H:	CHS1~CHS3 CHM1~CHM10 CHU1~CHU10 CHS21~CHS41 75Ω unbalanced
		UHF:	CHE21~CHE69 (PAL-G) 75Ω unbalanced
RF OUT SYSTEM	NV-SD22EG/EO NV-SD25EG/EO	UHF:	CHE36±4 (PAL G) 70^{+1}_{-3} dBμ, 75Ω unbalanced
	NV-SD22B	UHF:	CHE36±6 (PAL I) 73±3 dBμ, 75Ω unbalanced

ITEM	SPECIFICATION
VIDEO	HEADS: 2 rotary heads 1 pair for SP recording, playback and trick play (L-R heads)
	INPUT: EURO AV Connector (21 pin) 1.0 Vp-p, 75Ω terminated
	OUTPUT: EURO AV Connector (21 pin) 1.0 Vp-p, 75Ω terminated
AUDIO	HEAD: 1 Stationary head (Normal Audio)
	INPUT: EURO AV Connector (21 pin) More than −6 dBV (500 mV), More than 10 kΩ
	OUTPUT: EURO AV Connector (21 pin) −6 dBV (500 mV), 1 kΩ
TAPE FORMAT	VHS Cassette tape (Tape width 12.7 mm)
TAPE SPEED	23.39 mm/s Record/Playback Time: 4 hours with 240 min. type tape FF/REW Time: 2.5 min. with 180 min. type tape
DIMENSIONS	430 (W)×91 (H)×273 (D) mm
WEIGHT	4.3 kg
STANDARD ACCESSORIES	1 pc. DIN-RF Cable 1 pc. AC Mains Lead 1 pc. Infra-red Remote Controller

Weight and dimensions shown are approximate.
Specifications are subject to change without notice.

Panasonic

INTRODUCTION

This service manual contains technical information which will allow service personnels to understand and service this model.
Section 1 presents you with technical know how for actual servicing and general information of features and controls, enabling you to become familiar with each function.
Section 2 presents to your mechanical and electrical adjustment information as well disassembly and replacement procedures.
In the case of very common information relating to other models like mechanical adjustments, please refer to the appropriate service manual.
Section 3 schematic diagrams which give you detailed information such as waveforms, voltage data, function e.t.c. ...
Section 4 contains exploded views and parts list.
Please place orders using the parts list and not the drawing reference numbers.
If the circuit is changed or modified, this information will be followed by supplementary service manual to be filed with original service manual.

NOTE

Please place the order of Operating Instructions by refering the language you need, indicated at Descriptions in the Mechanical Replacement Parts List (Page.4-5).

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SECTION 1
GENERAL DESCRIPTIONS

1-1. SERVICE INFORMATION

<A> MECHANISM SERVICE POSITION

When servicing the K-Mechanism, the mechanism can easily be fixed by standing the mechanism up in the Main Frame as shown below to check easily.

In this position , the following services are possible.

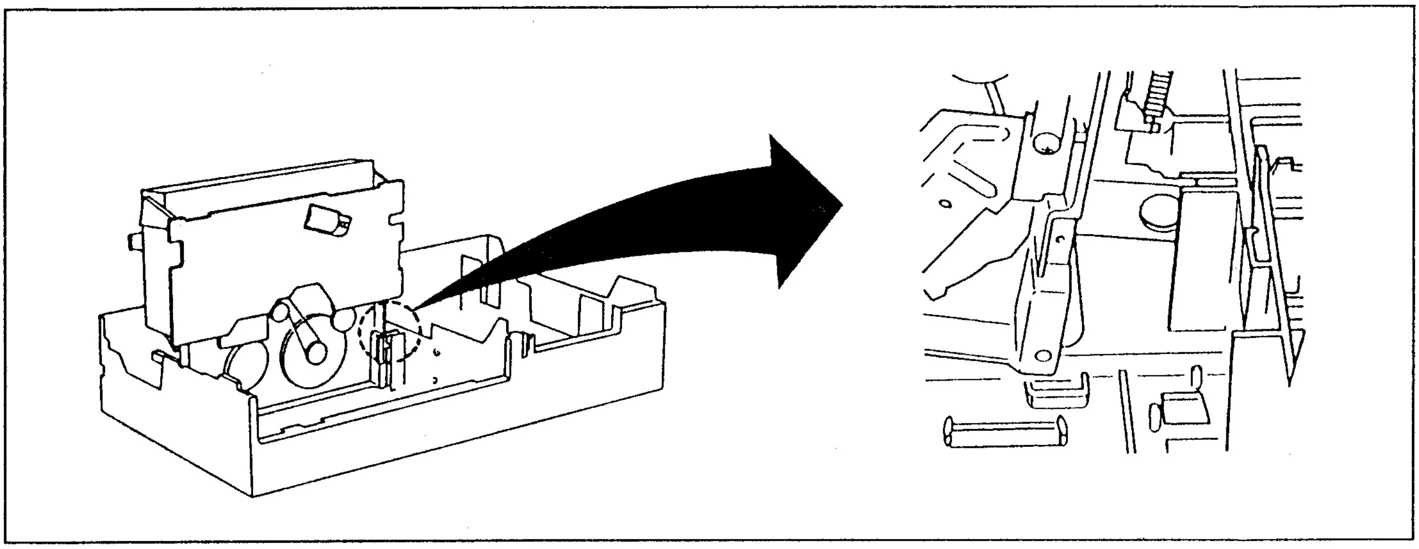


Fig.S1

<A-1> CHECKING OF GEAR PHASE ALIGNMENT CONDITION

1) Remove the Mechanism Connection C.B.A..
2) Check gear phase Alignment Condition of Mechanism described on the left side of frame.

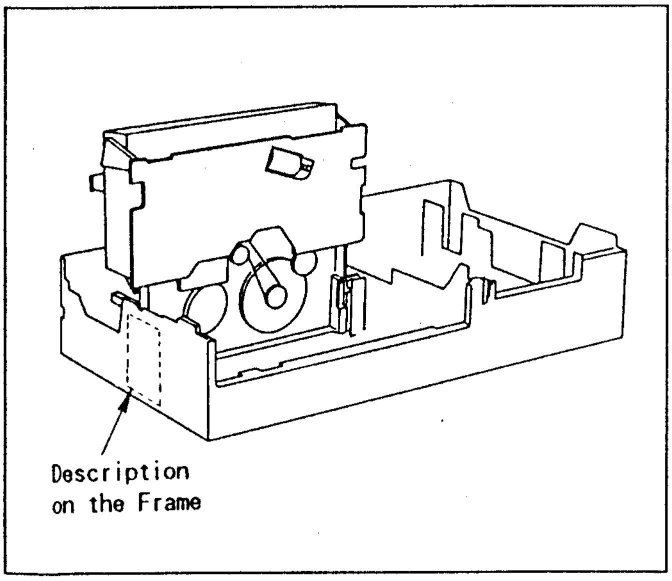


Fig.S2

<A-2> CHECKING OF LOADING/UNLOADING OPERATION

There are 3 methods for checking of loading/unloading operation as follows.

(1) HAND OPERATION

1) Remove the Mechanism Connection C.B.A..
2) Turn the Worm Gear or the Worm Wheel Gear (Remove the loading Motor Unit) manually.

(2) BATTERY OPERATION

1) Remove the Mechanism Connection C.B.A..
2) Connect the Battery (Manganes Type R6(AA) 3pcs. /+4.5v) to the Loading motor terminals.

(3) SERVICE INFORMATION DISPLAY OPERATION

1) Set the Service Information display mode. (Press the FF, REW and EJECT buttons simultaneously.)

2) Press the FF, REW and EJECT buttons 7 times to set the Service Mode 7. (The end of display on the Display becomes "--".)

3) In the above Service Information Display mode, the Loading Motor rotates for loading operation when the "PLAY" button is pressed. The Loading Motor rotates for unloading operation when the "STOP" button is pressed.

Remark:
Use the "SERVICE INFORMATION DISPLAY" mode for a final check of Mechanism movement.

<A-3> CHECKING REEL GEARS OPERATION

1) Remove the Mechanism Connection C.B.A..
2) Move the mechanism to "PLAY" position by loading operation (Refer to <A-2>).
3) Turn the "Rotor Unit" to check the movement of reel gears.

<B> MAIN & SUB MAIN C.B.A.s SERVICE POSITION

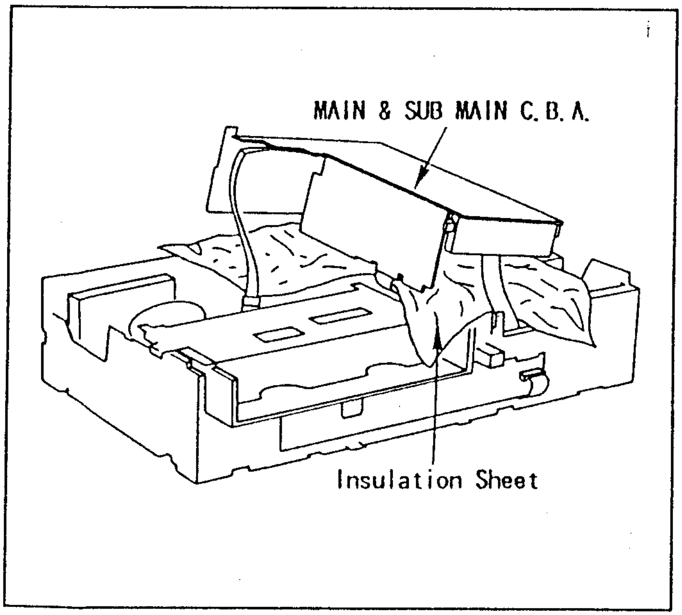

MAIN & SUB MAIN C. B. A.
Insulation Sheet

Fig.S3

<C> TUNER, TV DEMODU. & VPS PACK C.B.A.s SERVICE POSITION

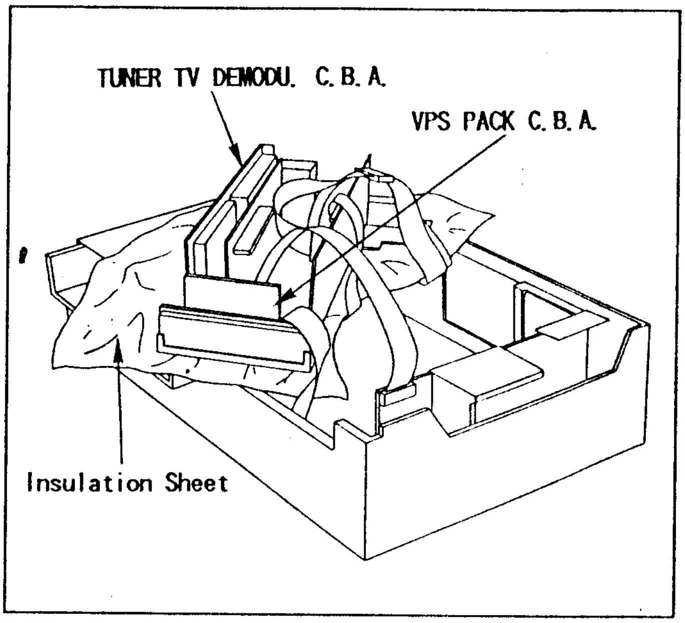

TUNER TV DEMODU. C. B. A.
VPS PACK C. B. A.
Insulation Sheet

Fig. S4

<D> LUMINANCE & CHROMINANCE PACK SERVICE POSITION

<Preparation>

1) Position the Luminance & Chrominance Pack C.B.A. with the Main C.B.A. after removing the Input / Output Jack and Tuner & TV Demodu. C.B.A..
2) Supply the video signal through the AV Terminal to check the Luminance & Chrominance Pack C.B.A..

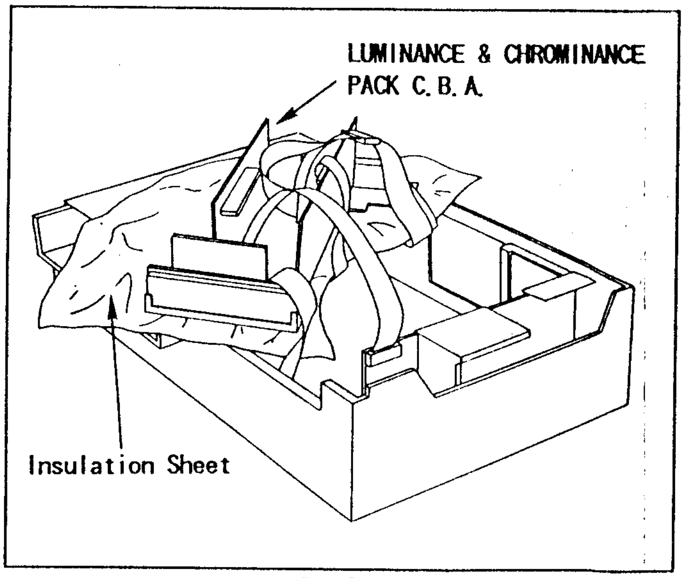

LUMINANCE & CHROMINANCE PACK C. B. A.
Insulation Sheet

Fig.S5

<E> CYLINDER UNIT REPLACEMENT

The Cylinder Unit can be replaced easily by the following method.

1) Remove the Top Panel.
2) Remove the 3 screws of the Cylinder unit with a magnetized screw driver through the holes on the Bottom Plate as shown in Fig.S6.

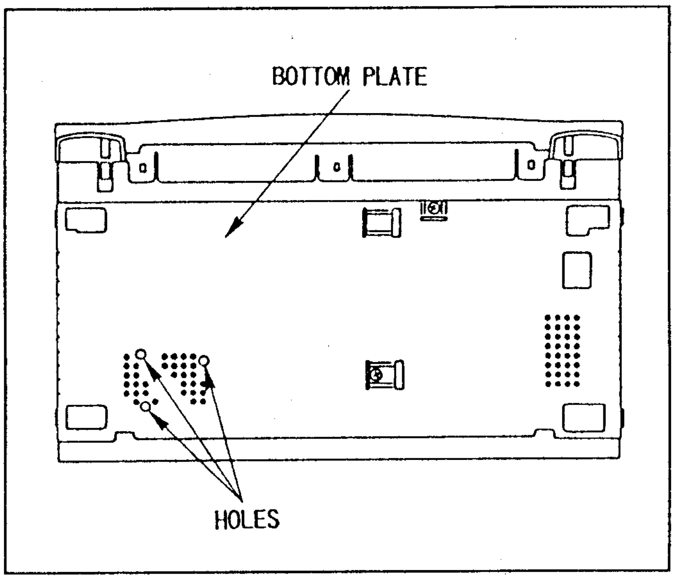

BOTTOM PLATE
HOLES

Fig.S6

<F> CAPSTAN STATOR UNIT ASSEMBLY

When replacing the CAPSTAN STATOR UNIT, the TOOL (VFK0851) must be used to centre the CAPSTAN STATOR UNIT.

Method:

1) Place the CAPSTAN STATOR UNIT into position.
2) Loosely screw in the 3 screws.
3) Insert the Stator Centering Tool (VFK0851) as show in Fig.S7.
4) Tighten the 3 screws.
5) Remove the Stator Centering Tool.

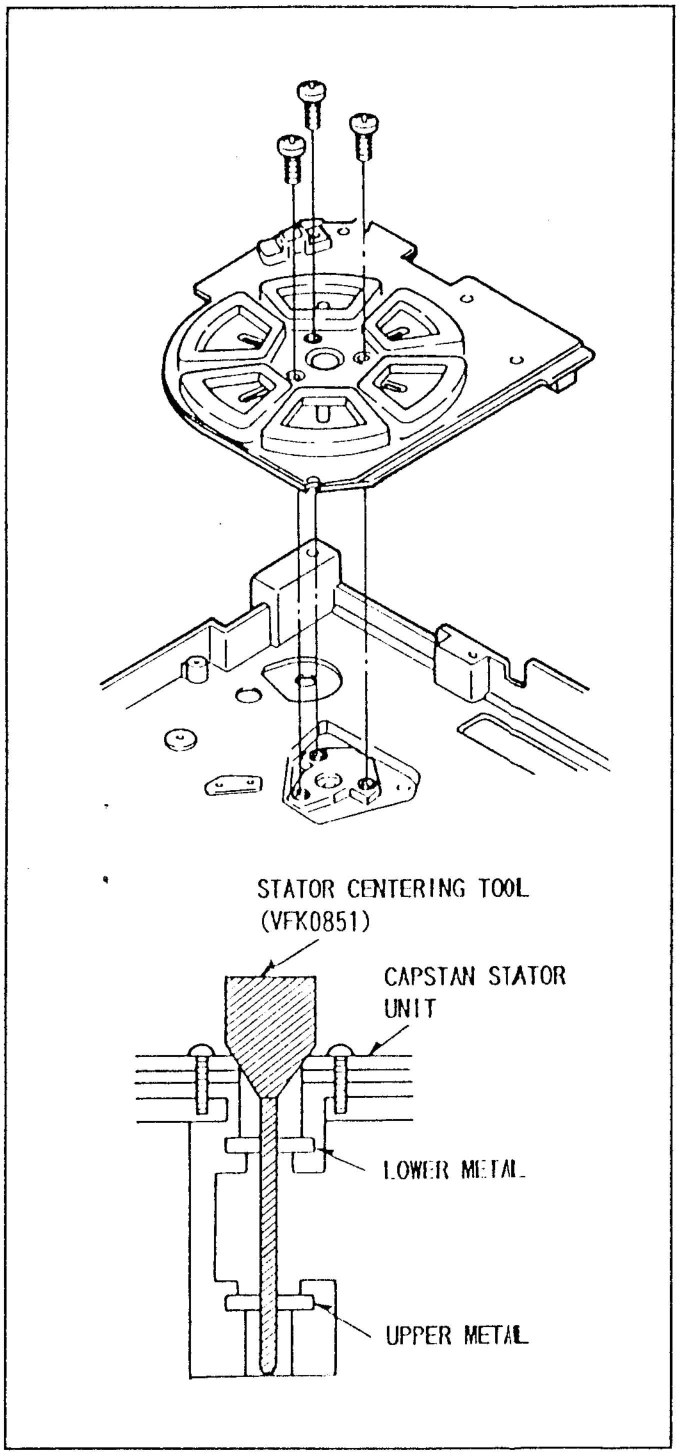

STATOR CENTERING TOOL
(VFK0851)
CAPSTAN STATOR UNIT
LOWER METAL
UPPER METAL

Fig.S7

<G> EJECT OPERATION

The main cam gear rotates in the direction of the arrow. The projection (B) of the carriage connection gear engages with the recession (A) of the main cam gear. The carriage connection gear rotates in the direction of the arrow to perform the Eject operation.

<NOTE>
If the Eject operation is performed without the cassette carriage installed while repairing or making the mechanical phase alignment, the main cam gear will not engage with the carriage connection gear and will not rotate.
To perform the Eject operation with the cassette carriage not installed, it is necessary to rotate the carriage connection gear by hand in the direction of the arrow.

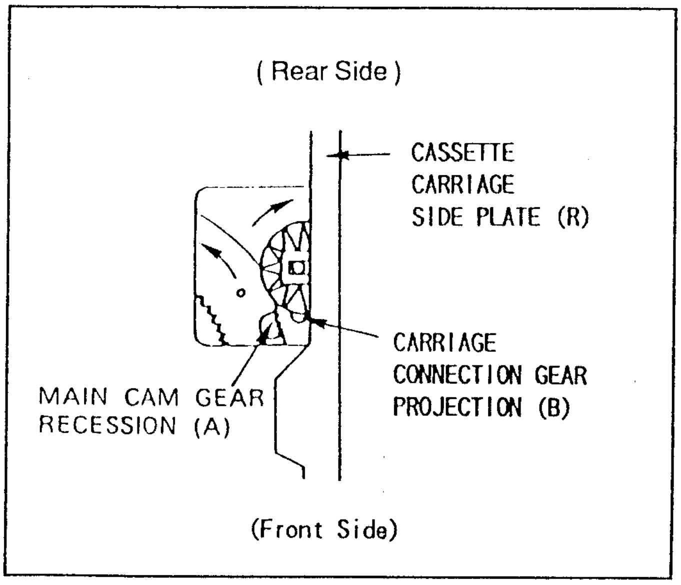

(Rear Side)
CASSETTE CARRIAGE SIDE PLATE (R)
CARRIAGE CONNECTION GEAR PROJECTION (B)
MAIN CAM GEAR RECESSION (A)
(Front Side)

Fig. S8 Top View of Eject Operation

<H> TAKE-UP PHOTO SENSOR OPERATION

1) While servicing of the K-Mechanism, the unit will not operate properly if a strong light (ex, Fluorescent light) falls on the Take- up Photo Sensor.
   In this case, cover the Take-up Photo sensor to prevent the light from falling on it.

2) While servicing of the K-mechanism with "Power On " and without cassette tape inserted, the Unit will not operate properly.

<I> POWER TRANSISTOR SERVICING

When removing the connector of the Power Transistor, hold the Power Transistor by hand to prevent damage.

<J> CASSETTE TAPE REMOVAL

If the electrical circuit is defective and the action of unloading and front unloading do not work properly, it is possible remove the cassette manually.
There are 2 methods of removing the cassette.

(1) HAND OPERATION

1) Remove the bottom plate.
2) Turn the WORM GEAR to "A" arrow mark direction manually as shown in Fig. S9, moving the LOADING POST to the unloaded position.
3) Turn the CAPSTAN clockwise to take up the tape.
4) Turn the WORM GEAR again to eject the cassette.

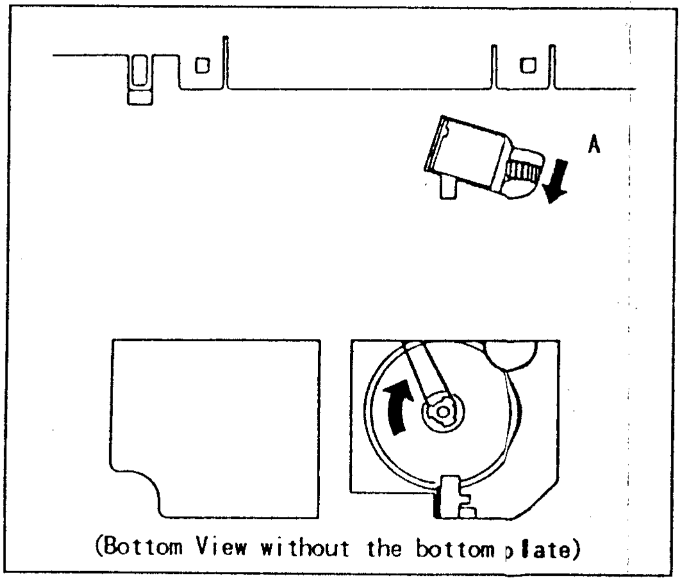


Fig. S9

(2) BATTERY OPERATION

1) Connect the battery (Manganes-Type R6 (AA) 3pcs./+4.5V) to P1503 as shown in Fig. S10, S11.
2) After moving the LOADING POST to the unloaded position, disconnect the battery to stop the motor.
3) Turn the CAPSTAN to clockwise to take up the tape.
4) Reconnect the battery to eject the cassette.

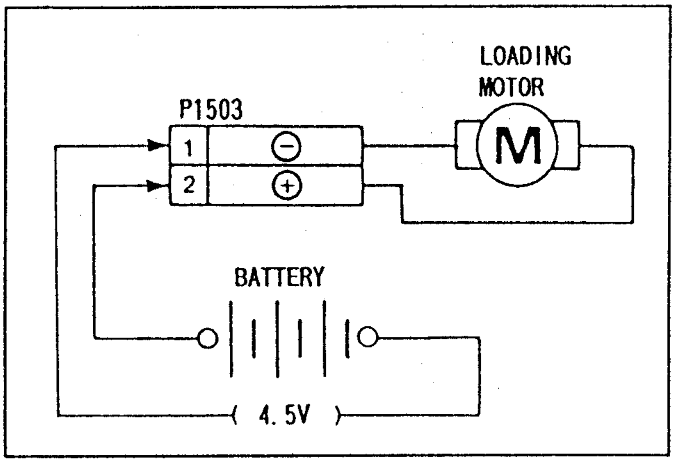

LOADING MOTOR
P1503
1
2
⊖
⊕
M
BATTERY
4.5V

Fig. S10

If the cassette tape can not be removed by the above 2 methods, remove it by the following method.

1) Remove the Top Panel.
2) Remove the Front Panel Unit.
3) Lift up the Pinch Arm after removing spring.
4) Push the P5 Arm and remove the Tape from tape transportation (P3, P2, P5 and P1 Post).
5) Turn the Capstan Motor to take up the Tape.
6) Remove 1 screw from the Side Plate (R) Unit to disconnect the Rack Gear from the Carriage Connection Gear.
7) Take out the Cassette Tape from the Cassette Compartment.

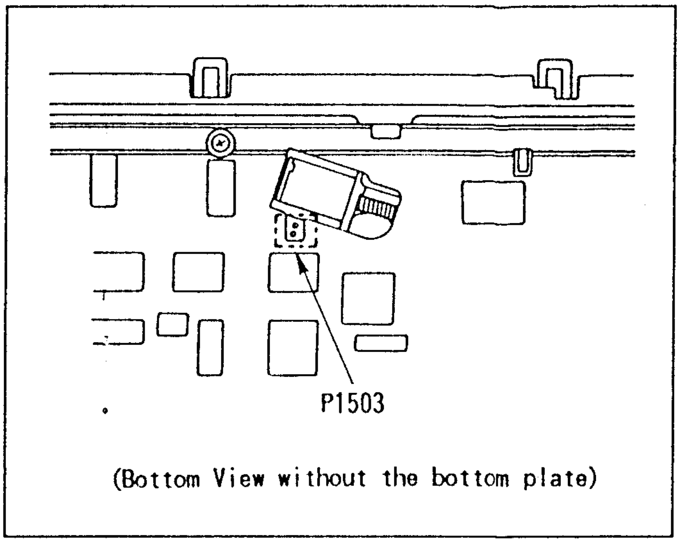

P1503
(Bottom View without the bottom plate)

Fig. S11

<K> FLAT RIBBON CABLE INSTALLATION

When installing the Flat Ribbon Cable on the connector, install the cable with the cable contacts facing the connector contacts.

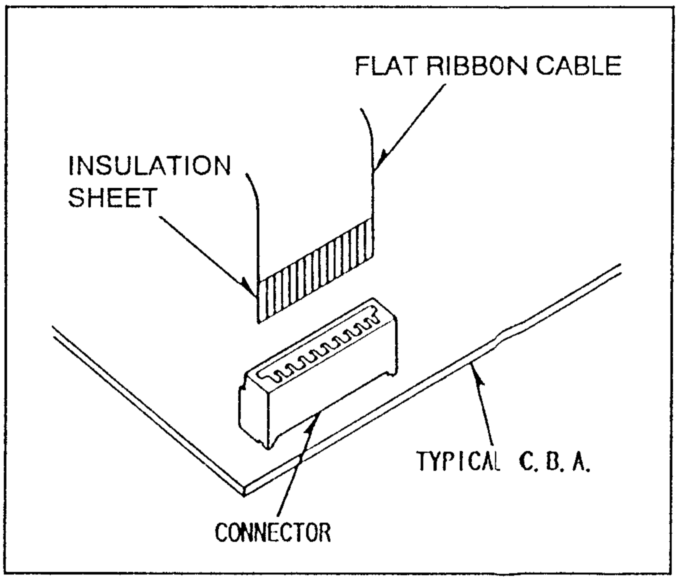

FLAT RIBBON CABLE
INSULATION SHEET
TYPICAL C.B.A.
CONNECTOR

Fig. S12

<L> CHANNEL MEMORY IC INITIALIZATION

When replacing the channel memory IC7503 (Part No. :M6M80011AP), its IC should be initialized.

Method:

1) Press the CH UP/DOWN button so that the channel indicator indicates "3".
2) Connect a jumper wire twice to Pin 54 and Pin 34 of IC7501.
3) Channel indication changes from "3" to "1".

Note:

1) It should be performed before tuning.
2) Do not turn off the power source during initialization or 1 second after.

1-2. SERIAL CLOCK TRANSMISSION ERROR DISPLAY

If the Serial Clock is not transmitted from IC6001 to IC7501, "E9" is displayed as shown in Fig. T1. This indication will be displayed the Operate button is either ON or OFF.

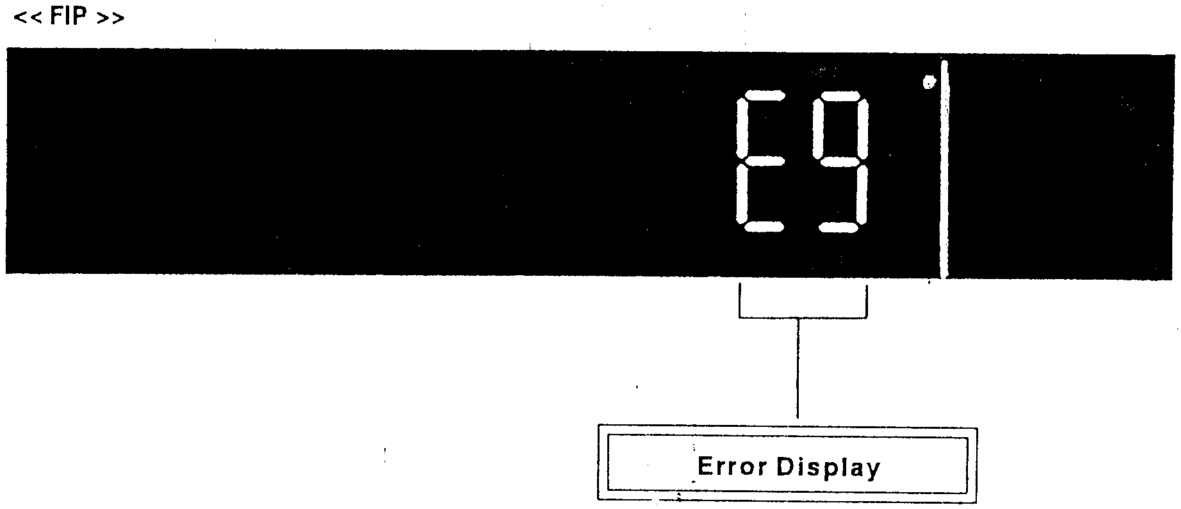
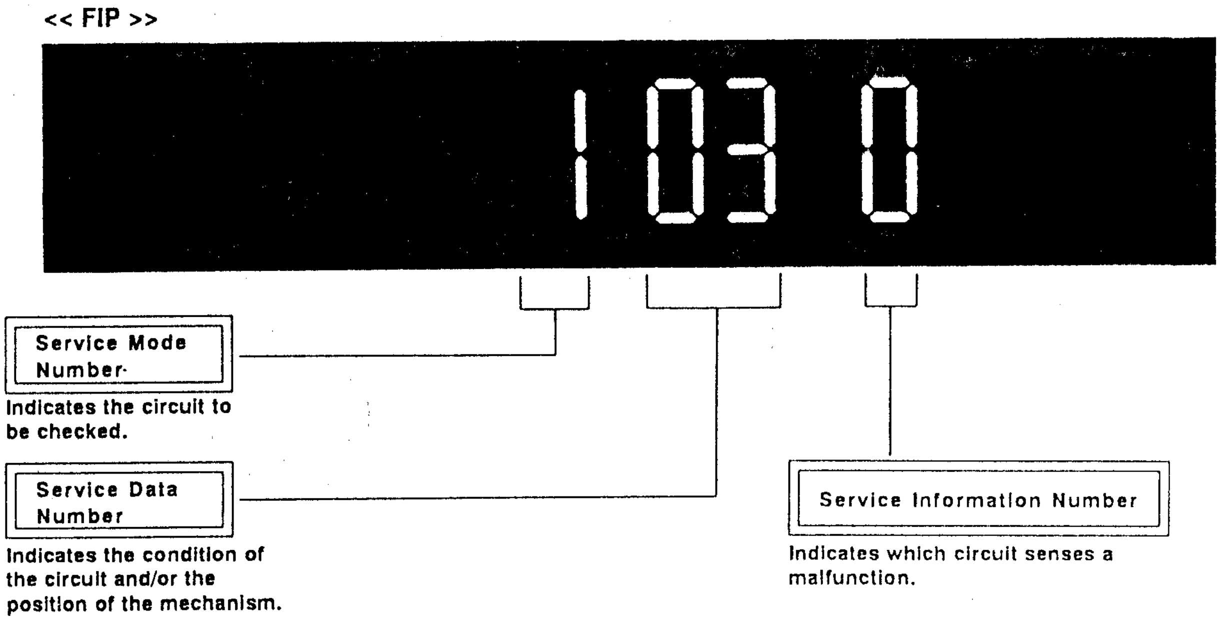


Fig. T1 Serial Clock Transmission Error Display

1-3. SERVICE INFORMATION DISPLAY



<< FIP >>
1 03 0
Service Mode Number
Indicates the circuit to be checked.
Service Data Number
Indicates the condition of the circuit and/or the position of the mechanism.
Service Information Number
Indicates which circuit senses a malfunction.

Fig. D1 Service Information Display

1-3-1. Purpose of Service Information Display

This information aids trouble shooting by indicating the source of the malfunction. The service mode number & service data number are used by the technician during repair while the service information can be used by the consumer to diagnose malfunctions allowing the technician to provide a more accurate repair cost estimate and reduce repair time.

1-3-2. Turning on Service Information Display

There are two ways to turn on the Service Information Display.

(1) Press the FF, REW and EJECT buttons simultaneously.
The Service Information will be displayed for 1 minute.

(2) Connecting a jumper wire between TLSERV and GND will display the service information indefinitely.

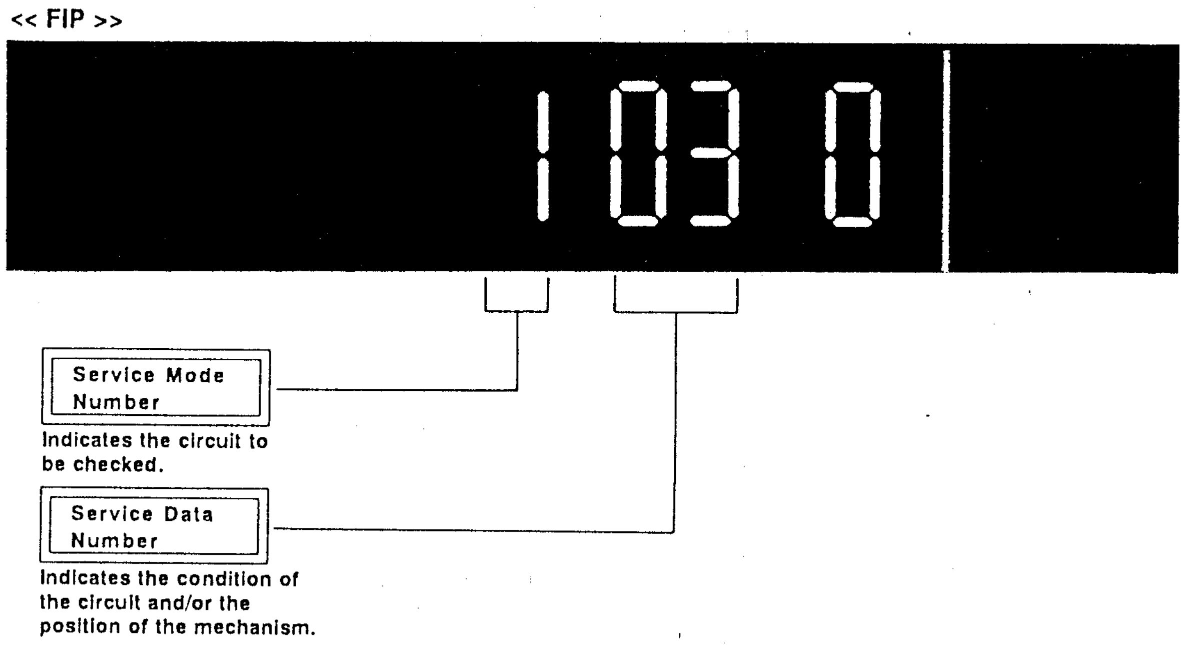
In the Service Information Display, there are four digits divided into 3 functions. The first digit indicates which of the 7 service modes that the unit is currently in.

MODE 1 :Checks tape protection circuit
MODE 2 :Checks tape transport mechanism
MODE 3 :Checks mode switching operation
MODE 4 :Checks control buttons
MODE 5 :Checks capstan motor
MODE 6 :Checks cylinder motor
MODE 7 :Checks loading/unloading operation

The second and third digits are service data which indicate the condition of the circuit or mechanism being checked.

The forth digit is the service information display. It is to be used by the consumer to help determine the source of a malfunction. The service information display operates independently of the service modes and stores the fault indication in memory for as long as AC power is supplied.

1-3-3. Use of Service Modes



<< FIP >>
1 03 0
Service Mode Number
Indicates the circuit to be checked.
Service Data Number
Indicates the condition of the circuit and/or the position of the mechanism.

Fig.D2 Service Mode Number and Service Data Number on S.I.D.

(1) Turn on Service Information Display.

(2) To change Service Modes press the FF, REW and EJECT buttons simultaneously.

(3) Mode 1 : 1 Check that the Sensor LED, Supply & Take-up Sensor circuits check the circuits by blocking the light from the Sensor LED to either or both Supply & Take-up Sensors.
When the light is blocked to both sensors, " 00 " should be indicated on the service data number. When the light is blocked to the supply sensor, " 01 " should be indicated.

(4) Mode 2 : 2 Checks the mode switch circuit while indicating mechanism position.
Service Data Numbers indicate the position of the mode switch and there by the mechanism position.

(5) Mode 3 : 3 Checks that mode switch circuit operations have been completed.
Service Data Number should indicate " 00 " after each mechanism operation is completed.

(6) Mode 4 : 4 Checks the operation circuit. Indicates if IC6001 receives the operating commands from the mode buttons and/or remote controller.

(7) Mode 5 : 5 Checks the capstan motor circuit.
Indicates if the IC6001 has received the command to rotate the capstan motor.

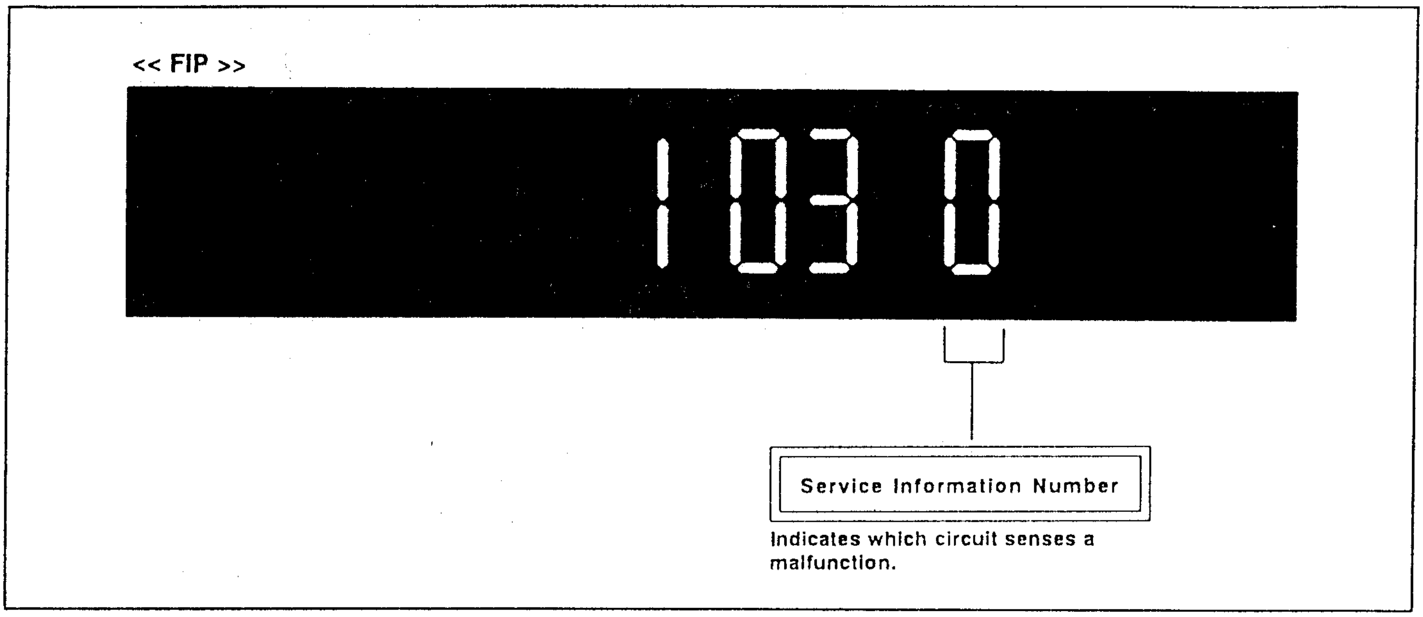
(8) Mode 6 : 6 Check the cylinder motor circuit. IC6001 has received the command to rotate the cylindermotor.

(9) Mode 7 : 7 Checks the Loading/ Unloading Operation.
The Loading Motor rotates for loading operation when the " PLAY " button is pressed.
The Loading Motor rotates for unloading operation when the " STOP " button is pressed. This mode can be displayed indefinitely until the OPERATE button is pressed.

<NOTE>

Refer to Fig. D5 for details of Service Data Number.

1-3-4. Service Information Number



<< FIP >>
1 03 0
Service Information Number
Indicates which circuit senses a malfunction.

Fig. D3 Service Information Number on S. I. D.

Refer to Fig. D4 for details of Service Information Number.

Note:

The Service Information Number display is independent of the service mode display. The Service Information Number will be stored as long as AC power is supplied. If a second error occurs, only the most recent error will be displayed.

Service Information Number	Malfunction
0	Normal (No problem)
1	Cylinder stop
2	Tape reel stop
3	Stop at position other than 4 or 6
4	Stop during unloading
5	Faulty capstan rotation
6	Stop during Cassette-IN/Eject operation
7	D.REC 12V error

Fig. D4 Detail Service Information Numbers

Service mode Number	Note for checking Service Data Numbers	Service Data Numbers	Indication	Remarks
1	———	00	No light detected at either sensor	Tape not required
		01	Tape Beginning. Light to Supply Photo Sensor is blocked.	
		02	Tape End. Light to Take-up Photo Sensor is blocked.	
		03	Light detected at both sensors.	
2	———	00	EJECT	Tape Required *1:STOP3; The Pinch Roller is on the capstan motor shaft. *2:STOP; The Pinch Roller is off the capstan motor shaft. Refer to Fig.D7 to Check mechanism Position and timing.
		01	Cassette-down	
		02	REV, REV SLOW	
		03	Loading/Unloading	
		04	PLAY/REC, STILL/PAUSE,CUE,FWD SLOW,STOP3*1	
		05	STOP *2	
		06	FF/REW	
		07	Intermediate position	
3	Disregard service data displayed until mechanism operation is completed. Then the display should indicate "00".	00	Any display other than "00" indicates a fault in the mode switch circuit or system.	Tape Required.
4	Display only when the operating button is pressed.	Refer to Fig. D6.		Tape not required
5	Left digit only, disregard Right digit display.	Left Digit 8 1 Right Digit	8, 9, u, A, -, n, L, and no display indicate that the Capstan motor "PLAY" command received by IC6001.	Tape required. If a symbol other than those listed is displayed, a malfunction in that circuit is indicated.
	Right digit only, disregard left digit display.	Left Digit 8 7 Right Digit	1, 2, 3, 4, 5, 6 7, indicate that the Capstan motor "CUE, FF, Forward slow" commands received by IC6001.	
	Right digit only, disregard left digit display.	Left Digit 8 Right Digit	8, 9, u, A, -, n, L, and no display indicate that the Capstan motor "Reverse, Rew, Reverse Slow" commands received by IC6001.	
6	Left digit only, disregard Right digit display.	Left Digit 10 Right Digit	1, 3, 5, 7, 9, A, n and no display indicate that the cylinder motor "ON" command received by IC6001.	Tape required. If a symbol other than those listed is displayed, a malfunction in that circuit is indicated.

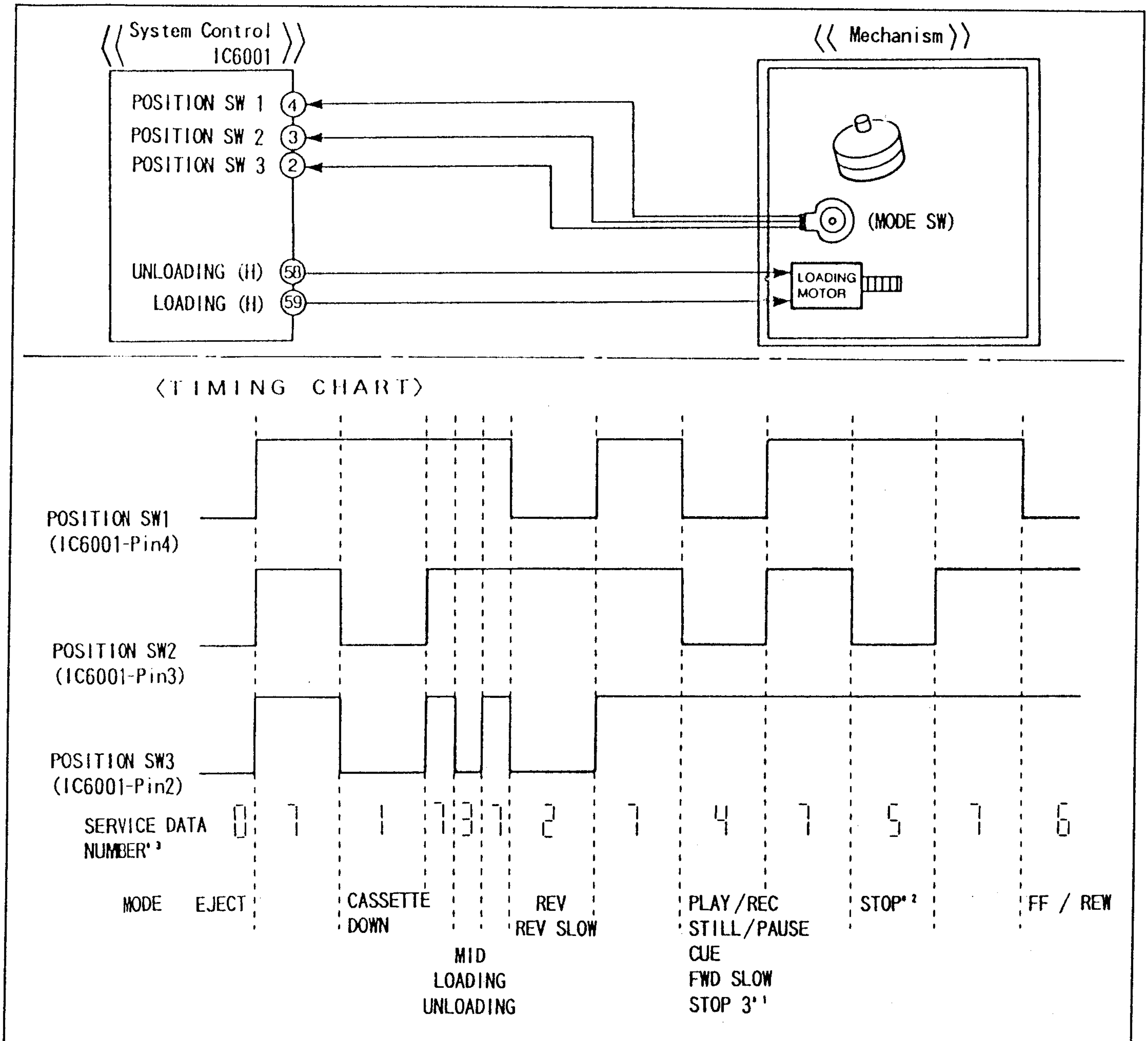
Fig. D5 Detail Service Data Number

SERVICE DATA NUMBERS	MODE BUTTONS	SERVICE DATA NUMBERS	MODE BUTTONS
3n	OPERATE	54	RESET
01	EJECT	5	ZERO STOP
-9	PAL/MESECAM	49.4U	INDEX
—	CHECK/PROG.	A1.A2	TRACKING(+,-)/V-LOCK
34 or 35	∧ ∨ , + −	—	PROG.
—	NEXT	—	NEXT
—	SLEEP / SHIFT	00	STOP
A4	TIMER REC	03.02	FF, REW
08	REC	—	TV / VTR
—	CLOCK SET	—	DISPLAY
—	TUNER PRESET	0U	PLAY
06	PAUSE / STILL		

Fig. D6 Service Data Display for Service mode 4

1-3-5. Timing Chart from Mode SW to System control IC6001

System control IC6001 senses the mechanism position through the Mode SW.
Fig. D7 shows the timing for Service Mode Number 2.



System Control IC6001
Mechanism
POSITION SW 1
POSITION SW 2
POSITION SW 3
UNLOADING (H)
LOADING (H)
4
3
2
58
59
(MODE SW)
LOADING MOTOR
〈TIMING CHART〉
POSITION SW1 (IC6001-Pin4)
POSITION SW2 (IC6001-Pin3)
POSITION SW3 (IC6001-Pin2)
SERVICE DATA NUMBER*3
0
7
1
7
3
7
2
7
4
7
5
7
6
MODE
EJECT
CASSETTE DOWN
MID LOADING UNLOADING
REV
REV SLOW
PLAY/REC
STILL/PAUSE
CUE
FWD SLOW
STOP 3*1
STOP*2
FF / REW

*1 : Stop 3 ; The Pinch Roller is on the capstan motor shaft.

*2 : Stop ; The Pinch Roller is off the capstan motor shaft.

*3 : Service Data Number This is for Service Mode Number 2.

Fig. D7 Timing Chart of Mode SW

1-3-6. Input/Output Chart for IC6001

<table>
<tr><th>Pin Number</th><th>Input/Output</th><th>Port Name</th><th>Function</th></tr>
<tr><td>1</td><td>I</td><td>SAFETY TAB</td><td>When inserting the cassette tape with safety tab, this port is low. When there is no safety tab, this port is high to prevent recording.</td></tr>
<tr><td>2</td><td>I</td><td>POSITION SW 3</td><td rowspan="3">
<table>
<tr><th>P.SW 3</th><th>P.SW 2</th><th>P.SW 1</th><th>Position (Mode) Name</th></tr>
<tr><td>O</td><td>O</td><td>O</td><td>EJECT</td></tr>
<tr><td>O</td><td>O</td><td>I</td><td>CASSETTE DOWN</td></tr>
<tr><td>O</td><td>I</td><td>O</td><td>REV, REV SLOW</td></tr>
<tr><td>O</td><td>I</td><td>I</td><td>MID (LOADING / UNLOADING)</td></tr>
<tr><td>I</td><td>O</td><td>O</td><td>PLAY/REC, STILL/PAUSE, CUE, FWD SLOW STOP3 *1</td></tr>
<tr><td>I</td><td>O</td><td>I</td><td>STOP</td></tr>
<tr><td>I</td><td>I</td><td>O</td><td>FF/REW</td></tr>
<tr><td>I</td><td>I</td><td>I</td><td>INTERMEDIATE</td></tr>
</table>
(*1) The Pinch Roller is on the capstan motor shaft.
</td></tr>
<tr><td>3</td><td>I</td><td>POSITION SW 2</td></tr>
<tr><td>4</td><td>I</td><td>POSITION SW 1</td></tr>
<tr><td>5</td><td>I</td><td>SUPPLY REEL PULSE</td><td>Supply Reel Pulse Input
(For detecting tape remaining)</td></tr>
<tr><td>6</td><td>I</td><td>NORMAL/SERVICE/ TEST</td><td>Service Mode Setting
Normal Mode: High
Service Mode: Middle
Test Mode: Low</td></tr>
<tr><td>7</td><td>I</td><td>DEW</td><td>When Dew is detected, this port is middle.
Normally, this port is low.</td></tr>
<tr><td>8</td><td>I</td><td>TEST</td><td>Not used (Low setting)</td></tr>
<tr><td>9</td><td>I</td><td>ENVELOPE SELECT</td><td>The playback envelope video signal level is detected at this input to select the video head in the special playback modes.</td></tr>
<tr><td>10</td><td>O</td><td>ROTARY SW</td><td>Normally,this signal is supplied to the chrominance circuit to perform the phase rotation. But NV-SD22/SD25 series use VIDEO H. SW instead of ROTARY SW.</td></tr>
<tr><td>12</td><td>O</td><td>HEAD AMP SWITCH</td><td>This signal is supplied to the head amp circuit to switch the video head, SP or LP.</td></tr>
<tr><td>14</td><td>O</td><td>ARTIFICIAL V /H/N</td><td>Artificial Vertical Sync Signal is supplied to video circuit to stabilize the picture in the special playback modes.</td></tr>
<tr><td>17</td><td>I</td><td>TAKE-UP PHOTO</td><td>Take-up Side Photo Sensor Input
(For detecting tape beginning)</td></tr>
<tr><td>18</td><td>I</td><td>SUPPLY PHOTO</td><td>Supply Side Photo Sensor Input (For detecting tape end.)</td></tr>
</table>

Pin Number	Input/Output	Port Name	Function
19	I	TAKE-UP REEL	Take-up Reel Pulse Input (For detecting tape remaining and reel (Cap.) lock.
20	O	SP/LP	Tape Speed Output SP: Low LP: High
47	O	VTR (H)	VTR / TV Switch Output VTR: High TV: Low
48	O	SP (H)	Tape Mode Output SP: High LP: Low
54	O	SENSOR LED ON (L)	When turning on the Sensor LED, this port is low. 1) STOP Mode: No lit. 2) FF, REW, CUE, REV Modes:DC is lit. 3) EJECT Mode: Pulse blinking. (Cycle: 320[msec])
55	O	VOLTAGE CHANGE (H)	When increasing the drive torque of loading motor to perform the FF/ REW mode, this port is low.
58	O	UNLOADING (H)	When unloading, this port is high.
59	O	LOADING (H)	When loading, this port is high.
63	O	SERIAL CLOCK	Serial Clock Output
64	I/O	SERIAL DATA	Serial Data In/Out
66	O	DELAYED REC (H)	When the video goes to the recording mode after a delay from the video recording command, this port is high.
67	O	DELAYED AUDIO REC (H)	When the audio goes to the recording mode after a delay from the audio recording command, this port is high.
68	O	FULL ERASE (H)	When the video goes to the recording mode, this port is high.
69	O	REC (H)	When the video goes to the recording mode, this port is high.
70	O	NTSC (L)	System Output NTSC: Low PAL: High
71	O	AUDIO MUTE (H)	When the audio goes to the mute mode, this is high.
72	O	CAPSTAN REVERSE (H)	When the capstan motor rotates in reverse, this is high.
73	O	AUDIO EE (H)	When the audio goes to the EE mode, this is high.

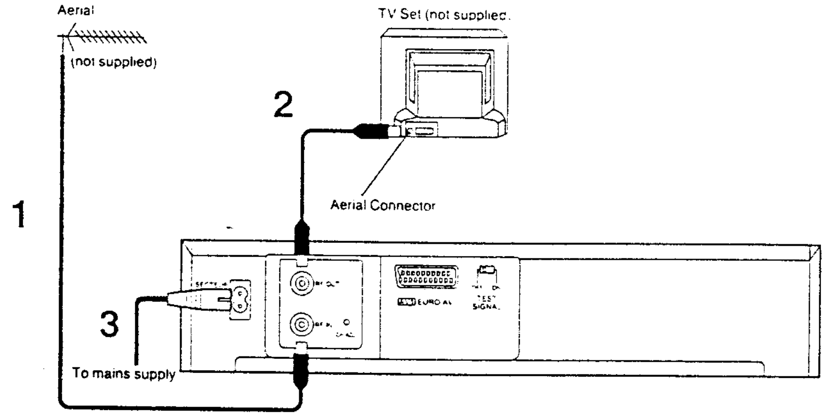
Pin Number	Input/Output	Port Name	Function
75	O	CURRENT EMPHASIS (H)	When the servo goes to the edit mode, this is high.
76	O	FF/REW (L)	When the servo goes to the FF/REW mode, this is low.
78	O	VIDEO EE (L)	When the video goes to the EE mode, this is low.
79	O	TRICK (L)	When the video goes to the special playback (CUE, REV, SLOW, STILL) mode, this is low.
80	O	POWER OFF (H)	Power ON/OFF Control is low when the power switch is turned on.
84	I	RESET (L)	When reseting the IC6001, this port is low.

Connections

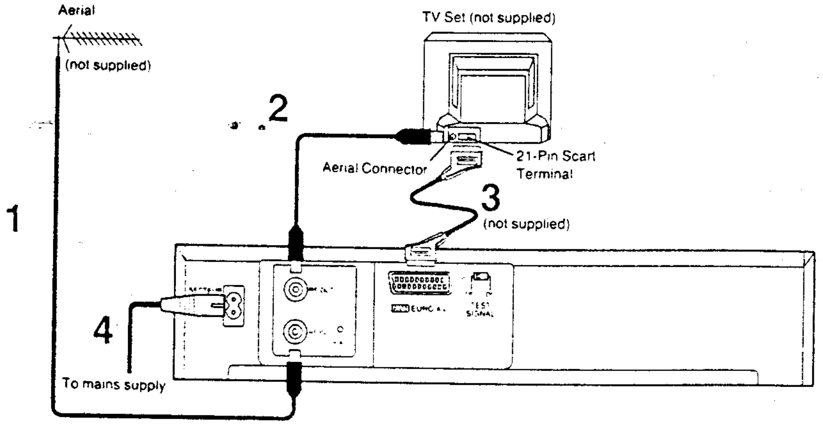
This tells you how to connect the VTR to an aerial, TV, etc.

Basic Connections

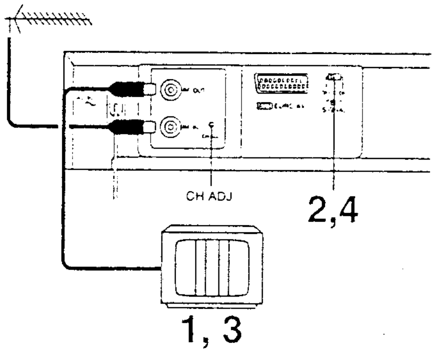
The following connections are required to record and play back the VTR through a TV set.

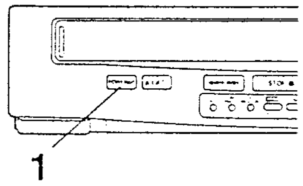

Aerial
(not supplied)
TV Set (not supplied)
2
Aerial Connector
1
3
To mains supply

Connection to a TV Set with 21-Pin Scart Terminal


Aerial
(not supplied)
TV Set (not supplied)
2
Aerial Connector
21-Pin Scart Terminal
3
(not supplied)
1
4
To mains supply

Tuning the TV to your VTR

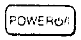
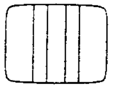




The VTR supplies a signal to the TV set via the RF coaxial cable on channel 36.
It is possible to view the video picture on your TV in the same way that you watch TV broadcasts.

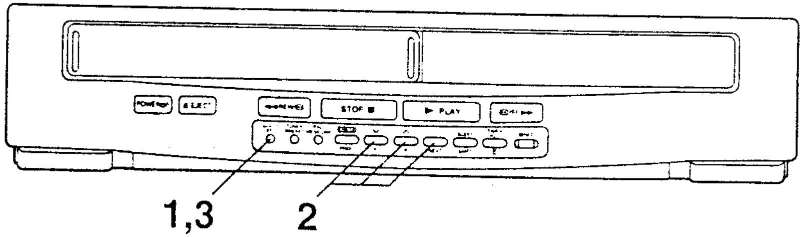
If you have connected the VTR to the TV through the 21-pin scart terminal, then you do not need to follow the procedure mentioned below.

Operations

1		Turn on the TV and VTR.
2	OFF ON TEST SIGNAL	To generate a test pattern, set **TEST SIGNAL** to ON.
3		Set the TV to an unused position which you wish to use for your video playback.
4	OFF ON TEST SIGNAL	Set **TEST SIGNAL** to OFF.

Note:
The test signal is transmitted on video channel 36. If you are encountering interference from a TV broadcast on this video channel, you may readjust to another free channel (32~40) by using the **CH ADJ.** screw which is located on the rear of the VTR.
Please note that if the **CH ADJ.** screw is used then you will have to retune your TV to the test signal as in item **2** to **4** above

Setting the Clock of the VTR



The built-in clock is used to activate the timer for automatic recording and must be set to the correct time.

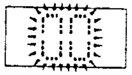
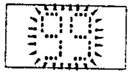
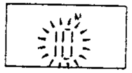
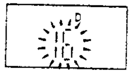
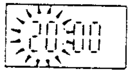
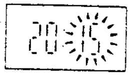
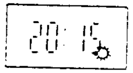
The built-in digital clock employs the 24-hour system.

Preparation

Turn on the VTR.

For Example:

Date; 16th, October, 1999
Time; 20:15

Operations		Display Symbols	
1	CLOCK SET ◎		Keep **CLOCK SET** pressed for more than 2 seconds.
2	Set each item by pressing + or – and **NEXT**.		
			Set **Year** "99".
			Set **Month** "10".
	↓		Set **Date** "16".
			Set **Hour** "20".
			Set **Minute** "15". • There is no need to press **NEXT**.
3	CLOCK SET ◎		Press **CLOCK SET**. • The clock will start.

Note:
The clock operates for at least 60 minutes by its backup system in the event of power failure

Time Reset Function

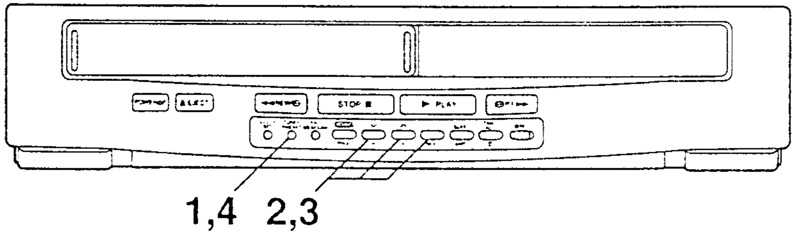
If the clock is less than two minutes slow or fast, it can easily be reset to the proper time.

For example:
Resetting the clock to 12:00.00

1 Keep **CLOCK SET** pressed at any time between 11:58.00 and 12:01.59 for more than 2 seconds.

2 Press **CLOCK SET** again as soon as you hear the 12:00.00 time signal.

Storing TV Broadcasts into your VTR



Introduction

The VTR is fitted with its own tuner (just like a normal TV set) and can be pre-set to receive up to 42 TV broadcast stations.

Preparation

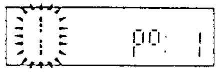
- Confirm that the TV is on and the VTR viewing channel is selected.
- Turn on the VTR and select any programme position except A1.

Operations

Display Symbols

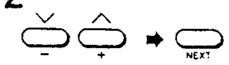
1

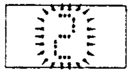
TUNER PRESET



Keep **TUNER PRESET** pressed for more than 2 seconds.

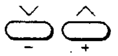
2





Select the programme position, then press **NEXT**.

3



Search for the required TV station.

- Only NV-SD22EG
  Press **PAL/MESECAM** to select the broadcasting system for the TV station to be tuned.
  PAL: MESECAM indicator should not be lit.
  SECAM: MESECAM indicator should be lit.
- Press **NEXT** and repeat steps 2–3 for each programme position you want to tune to a station.

4

TUNER PRESET

Press **TUNER PRESET** twice.

Fine Tuning Procedure

1 Keep **TUNER PRESET** pressed for more than 2 seconds, and then press again.

2 Press **NEXT**.

3 Press + or − to obtain the best tuning condition.
- "A" Indicator disappears.
- To return the tuning to its former state, press **SHIFT**.

4 Press **TUNER PRESET**.

Blanking of Unoccupied Programme Positions

1 Keep **TUNER PRESET** pressed for more than 2 seconds.

2 Select a programme position which you do not want to tune to a TV station, by using + or −.

3 Press **SHIFT**. ("− −" is displayed.)
- Repeat steps 2 and 3 for another unoccupied programme positions to skip during the selection of the programme positions.
- To cancel the blanking of a programme position, select that programme position on the VTR and then press **SHIFT**.

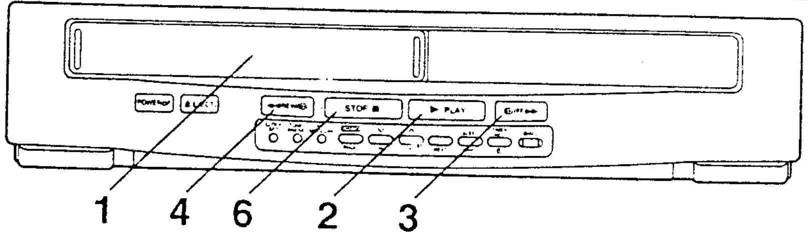
4 Press **TUNER PRESET** twice.

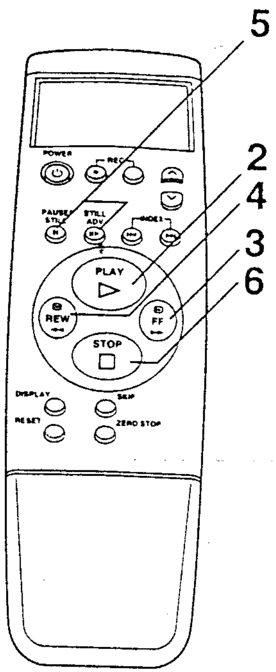
Channel Plan

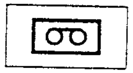
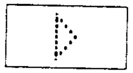
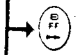
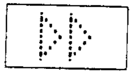
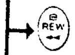
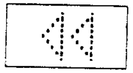
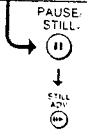
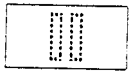
Channel Indication	TV Channel	
	Germany/Italy	Other Countries
2–12	*E2–E12	E2–E12
13–20	A–H (Only Italy)	——
21–69	21–69	21–69
74–76	——	S1–S3
80–82	——	M1–M3
83–89	S4–S10	M4–M10
90–99	S11–S20	U1–U10
121–141	**S21–S41 (Only Italy)	S21–S41

*In Italy: H1...(11), H2...(12)
**Only for 8 MHz channel raster

Playback



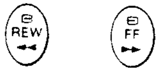


Operations	Display Symbols	
1		Insert a recorded cassette tape.
2		Start viewing the picture.
3 		Search forward by tapping FF. • To change back to normal playback, press PLAY.
4 		Search backward by tapping REW. • To change back to normal playback, press PLAY.
5 		View a still picture. • To advance one frame of the still picture, press STILL ADV. • To continue the normal playback, press PLAY or PAUSE/STILL.
6		Stop viewing the picture.

Other Playback Functions

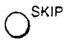
To obtain High Speed Picture During Fast Forward or Rewind

Keep **FF** pressed during fast forward.
Keep **REW** pressed during rewind.



To skip Scene

Press **SKIP** during playback.



- The following 30 seconds will be skipped.
- Each press gives 30 seconds time span up to 4 minutes.

To return to a Spcified Scene

1 Press **RESET** to set the counter to 0:00.00.
2 After playback, press **ZERO STOP** in the stop mode.

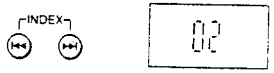
RESET
ZERO STOP

- The tape will be rewound or fast forwarded to 0:00.00.

To find the Beginning of Each Recording

For example:
Searching for the 2nd recorded segment in the forward direction.

Press **INDEX ►►|** twice.



- After finding the specific recorded segment, playback starts automatically.
- For the reverse direction, press **INDEX |◄◄**.
- Up to 20 index signals can be searched for in both directions.
- The figure on the display is decremented by 1 each time an index signal is located.

Recording Index Signals
Index signals are recorded in following cases
- When a recording is started by pressing REC
- When REC is pressed during recording
- When timer recording is activated

Note:
- Only NV-SD22EG
  During Playback, set **PAL/MESECAM**.
  PAL : When playing back a tape recorded in the PAL system
  MESECAM: When playing back a tape recorded in the MESECAM system
  MESECAM Indicator lights up.
- Cue or review playback will be automatically released after 10 minutes, and still playback after 5 minutes.
- The INDEX search function can only work correctly, if the index signals are spaced at least 3 minutes apart.

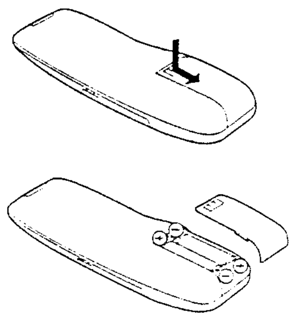
Power Source for the Remote Controller

The remote controller is powered by 2 "AA", "UM3" or "R6" size batteries. The life of the batteries is about one year, although this depends on the frequency of use.

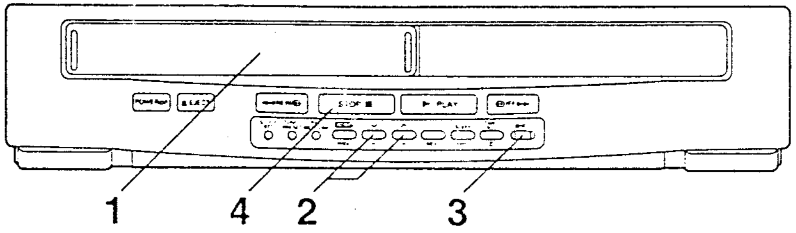
Precautions for Battery Replacement

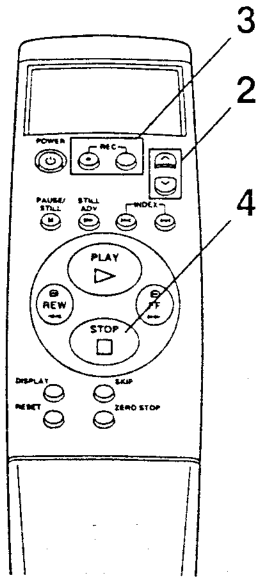
- Load the new batteries with their polarity (⊕ and ⊖) aligned correctly.
- Do not apply heat to the batteries, or an internal short-circuit may occur.
- If you do not intend to use the remote controller for a long period of time, remove the batteries and store them in a cool and dry place.
- Remove spent batteries immediately and dispose of them.
- Do not use an old and a new battery together, and never use an alkaline battery with a manganese battery.

Installing the Batteries



On-the-spot Recording





Operations	Display Symbols	
1		Insert a cassette tape. • If it has already been inserted, press **POWER** to turn the VTR on.
2 ⌃ ⌄	⁝	Select TV station.
3 REC ⊙ ○	REC	Start recording.
4 STOP ◻		Stop recording.

To interrupt Recording

Press **PAUSE/STILL** during recording.
Press again to continue recording.

PAUSE/STILL ⏸

To record One TV Programme while Viewing Another Programme

1 Refer to the on-the-spot recording operations steps **1** to **3**.

2 Select the TV programme on your TV set you wish to view at the present time.

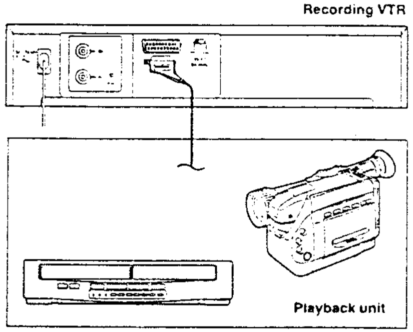
Notes:

- When a video cassette with a broken off tab is inserted, the "▭" indication will flash to indicate that recording is not possible.
- The recording pause mode will be automatically released after 5 minutes, and be back to the stop mode

Assembly Editing

This function can be used to make up an edited tape from other recordings or video sources.

This enables you to record a new segment immediately after a previously recorded segment.



Preparation

- Connect a movie camera or another VTR to this VTR as shown.
- Insert a recorded cassette tape with an intact erasure prevention tab.
- Select the video source required by pressing **INPUT SELECT** to set A1.
- Only NV-SD22EG
  Set **PAL/MESECAM** according to the colour TV system of the video source.
  PAL: When receiving PAL signals
  MESECAM: When receiving SECAM/MESECAM signals
  The MESECAM indicator lights up.

Operations

1 Search for the end of the previous recording.

PLAY ▷

2 Press **PAUSE/STILL**.

PAUSE/STILL ⏸

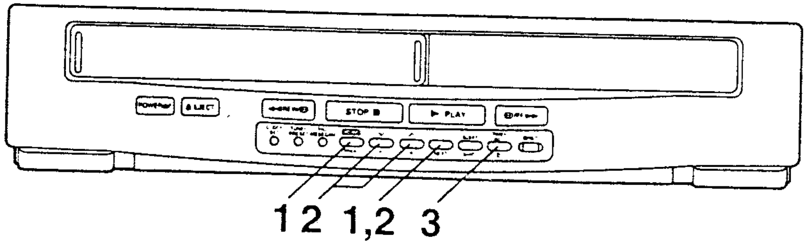
3 Press **REC** to switch the VTR from the pause mode to the recording standby mode.

REC ⊙ ○

4 Start the new recording by pressing **PAUSE/STILL** again.

PAUSE/STILL ⏸

Timer Recording



Up to 8 timer programmes can be recorded up to one month in advance by setting the timer.

Preparation

Insert a cassette tape wi'': an intact erasure prevention tab.

For Example:

Timer Programme number;	1
Programme position (channel);	2
Date;	27th, October
Starting time;	20:02
Ending time;	21:30

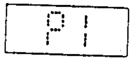
(Present date; 16th October)

Operations

Display Symbols

1

CHECK
PROG
NEXT



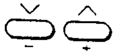
Select **Timer Programme number** "1", and then press **NEXT.**

P1 --------: When nothing is programmed

P1 : When something has already been programmed

2 Set each items by pressing + or – and **NEXT.**

Set **Programme position** (channel) "2".

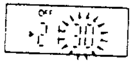


Set **Date** "27".

Set **Starting time** (hour) "20".

Set **Starting time** (minute) "02".

Set **Ending time** (hour) "21".



Set **Ending time** (minute) "30".
- There is no need to press **NEXT**.

3

To activate timer recording, press **TIMER REC.**

Timer Recording from External Signal Source

If Timer Recording is performed by a unit connected to the Euro AV socket, select the A1 indicator for the programme position.

Setting other Programmes in Succession

Repeat steps 1 and 2.

Checking a Timer Programme

Select the timer programme number to be checked by pressing **CHECK/PROG** while the timer recording function is on.

Cancelling a Timer Programme

1 Press **TIMER REC** to turn off the timer recording function.

2 Select the timer programme number to be canceled by pressing **CHECK/PROG.**

3 Press + and – simultaneously for more than 3 seconds.

Note:

If a timer recording is not performed to the end (due to insufficient tape or cancellation by the user), the programmed timer recording data will be cancelled from the memory by 4 a.m. two days later.

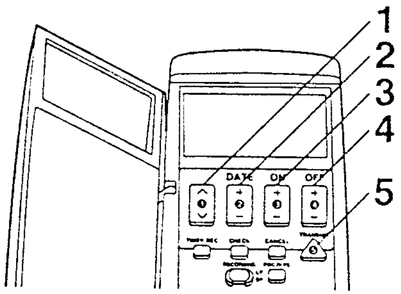
However, if the Timer Record Function is activated at that time, the programmed timer recording data will be cancelled at 4 a.m. the next day.

PDC (Programme Delivery Control)/VPS (Video Programme System)

The Video Programme System (VPS) or the Programme Delivery Control (PDC) is a very convenient system which assures that the TV programmes you have programmed for timer recording will be recorded exactly from beginning to end, even if the actual broadcasting time differs from the scheduled time due to delayed start or extension of the programme duration. Also, if a programme is interrupted and, for example, some special news are inserted, the recording will also be interrupted automatically and resumed when the programme continues.

- Press **SHIFT** in step 2 to cancel the VPS (PDC) function.
- In the case of VPS (PDC) recording, use the correct time (VPS/PDC time) for recording the TV programmes. VPS (PDC) recording is not performed when the time (VPS/PDC time) is incorrect, even if only by one minute.
- If the actual broadcasting times of timer recordings overlap (regardless of whether they are VPS/PDC-controlled), the recording that starts first has always priority, and the recording of the later beginning programme will start only after the first timer recording has finished.
- When the VPS (PDC) signal drops out because the broadcast signal is weak, or when a broadcasting station does not transmit a regular VPS (PDC) signal, the timer recording will be performed in the normal mode (without VPS/PDC) even if it was programmed for VPS (PDC). In this case, even if the timer recording is performed, whatever has been programmed will not be cancelled at that particular time but at 4 a.m. on the following day.
- Model NV-SD22EO is not equipped with VPS (PDC) function. The VPS (PDC) function becomes operative when the VTR is equipped with the optional VPS (PDC) decoder. Consult your authorized video dealer.

Using the Remote Controller



For Example:

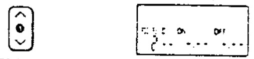
Programme position (channel);	2
Date;	27th, October
Starting time;	20:02
Ending time;	21:30

Preparation

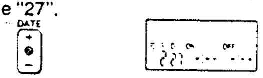
- Insert a cassette tape with an intact erasure prevention tab.
- Open the door of the remote controller.

Operations **Display Symbols**

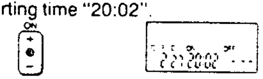
1 Set Programme position (channel) "2".



2 Set Date "27".

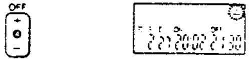


3 Set Starting time "20:02".



- When it is kept pressed, the indication changes in 30-minute steps.

4 Set Ending time "21:30".

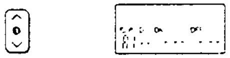


5 Press **TRANSMIT**.

6 Close the door of the remote controller.

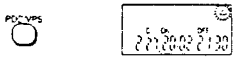
Timer Recording from External Signal Source

If Timer Recording is performed by a unit connected to the Euro AV socket, select the A1 indicator in step 1 for the programme position.



Turning VPS/PDC function on and off

Press **PDC/VPS** in any of steps 1–4.



Checking a Timer Programme

- The timer recording indicator "⏲" is lit.

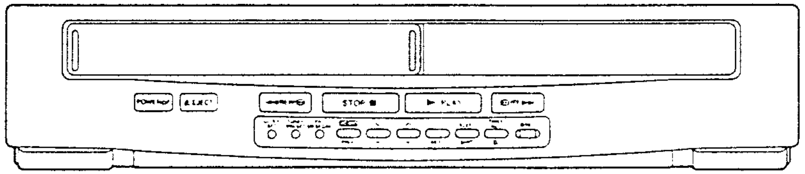
Press **CHECK** repeatedly until the desired timer programme number is displayed.

Cancelling a Timer Programme

1 Press **CHECK** repeatedly until the desired time programme number is displayed.

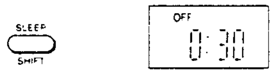
2 Press **CANCEL**.

Other Functions



Automatic VTR off time setting

Press **SLEEP** for the desired time.



- Each press gives a 30 minutes time span up to 9 hours.
- To cancel the setting time, press **SLEEP** repeatedly to set 0:00.

Other Automatic Functions

Automatic Playback

When a cassette without an erasure prevention tab is inserted, the VTR starts playback automatically.

VTR-off Playback

When the VTR is off, an inserted cassette can be played back by pressing **PLAY**.

Automatic Rewinding

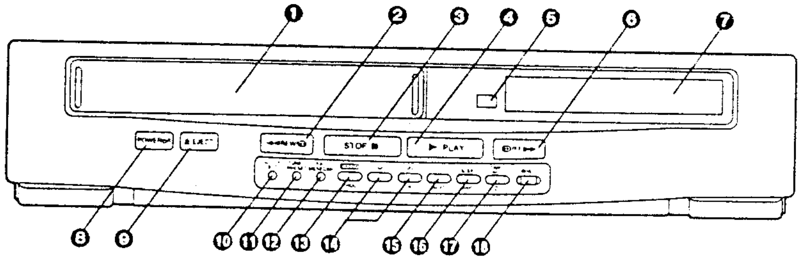
When the tape reaches its end during recording (except for timer recording) or playback, it will automatically be rewound to the beginning.

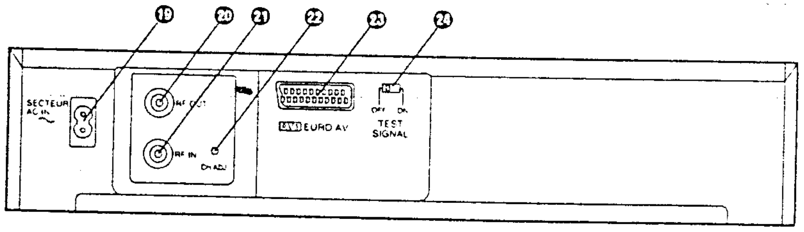
Automatic Switching Off and Ejection

When the VTR is switched off, an inserted cassette can be ejected simply by pressing **EJECT**. The VTR will eject the cassette and automatically turn itself off again.

Controls and Connection Sockets

This gives a detailed explanation of the function of each button, switch and connection socket.





❶ **Cassette Compartment**
Insert a video cassette here.

❷ **REW (REWIND)**

In the stop mode:	To rewind the tape.
In the playback mode:	To search backward.
In the rewind mode:	To obtain high speed picture.

"◁◁" is lit.

❸ **STOP**
To stop any playback or recording.

❹ **PLAY**
To start playback. "▷" is lit.

❺ **Infra-red Remote Control Receiver Window**

❻ **FF (FAST FORWARD)**

In the stop mode:	To fast forward the tape.
In the playback mode:	To search forward.
In the fast forward mode:	To obtain high speed picture.

"▷▷" is lit.

❼ **Display**

❽ **POWER ⏻/I**
Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still connected to the mains.

❾ **EJECT**
To eject a video cassette.

⓾ **CLOCK SET**
To set the time.

⓫ **TUNER PRESET**
To initiate TV station settings for the tuner.

⓬ **PAL/MESECAM (Only NV-SD22EG)**
Set according to the colour TV system used during recording and playback.
When the MESECAM Indicator is lit, the MESECAM system is selected.

⓭ **CHECK/PROG**
To display details of preset timer recording while the timer recording function is on.
To select a timer programme number.
"P1, P2, P3...or P8" is lit.

⓮ **∨ ∧/− +**
To select the required programme position (TV station).
To set the clock and timer recording

⓯ **NEXT**
To proceed to the next item during setting procedure

⓰ **SLEEP/SHIFT**
To set the time to turn off the VTR automatically.
To blank unoccupied programme position.

⓱ **TIMER REC**
To turn the timer recording function on and off.
⏲ is lit or not lit.
Once operating timer recording function, the normal VTR operation is not possible unless this button is set to off.

⓲ **REC**
To start a recording

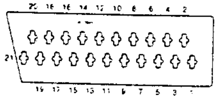
⓳ **AC IN~**
To connect to the main power supply

⓴ **RF OUT**
To connect to the aerial terminal on a TV set.

㉑ **RF IN**
To connect to the external aerial.

㉒ **CH ADJ.**
To adjust the RF transmitting channel 32~40.

㉓ **EURO AV**
This 21-pin scart terminal carries input and output signals for both picture and sound. TV sets equipped with a similar socket can be connected here.
This is also called Scart
Peritel
Euro Connector
Euro AV

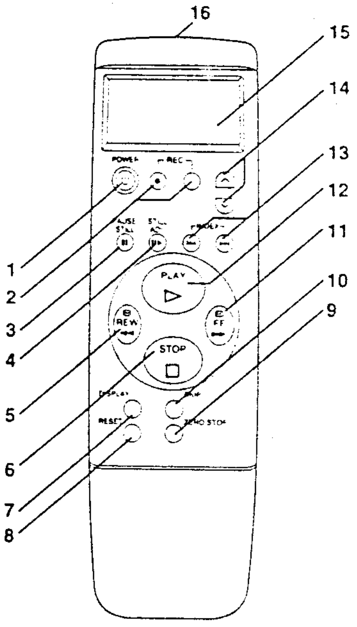


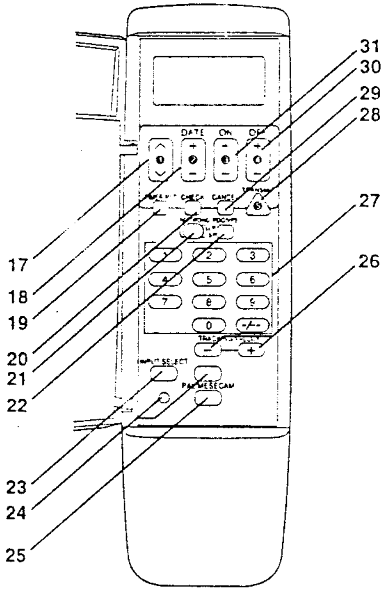
1	AUDIO OUTPUT	8	SWITCHING VOLTAGE
2	AUDIO INPUT	17	VIDEO GROUND
3	AUDIO OUTPUT	19	VIDEO OUTPUT
4	AUDIO GROUND	20	VIDEO INPUT
6	AUDIO INPUT	21	GROUND

No connection: 5, 7, 9, 10, 11, 12, 13, 14, 15, 16, 18

㉔ **TEST SIGNAL**
The test signal is transmitted on channel 36.

Infra-red Remote Controller





1 POWER
Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still connected to the mains.

2 REC
To start a recording.
- Press both buttons simultaneously.

3 PAUSE/STILL
During playback: Still picture
During recording: To interrupt recording.

4 STILL ADV
To advance a still picture during still playback.

5 REW (REWIND)

In the stop mode:	To rewind the tape
In the playback mode:	To search backward
In the rewind mode:	To obtain high speed picture

"◁◁" is lit.

6 STOP
To stop any playback or recording.

7 DISPLAY
To change the indication on the VTR Display
Clock—Counter—

8 RESET
To reset the tape counter (elapsed time) to "0:00.00".
- The tape counter is automatically reset to "0:00.00" when a video cassette is inserted.

9 ZERO STOP
For the zero stop function.

10 SKIP
To start cue playback in 30 seconds interval during playback.
- Each press gives a 30 seconds time span up to 4 minutes.

11 FF (FAST FORWARD)

In the stop mode:	To fast forward the tape
In the playback mode:	To search forward
In the fast forward mode:	To obtain high speed picture

"▷▷" is lit.

12 PLAY
To start playback. "▷" is lit.

13 INDEX
For the index search function.

14 ∨ ∧
To select the required programme position (TV station) of the VTR.

15 Display

16 Infra-red Transmitter
The programming data are transmitted from here to the VTR.

17 ∧ ∨
To programme a timer recording.

18 DATE
To programme a timer recording.

19 TIMER REC
To turn the timer recording function on and off.
⏲ is lit or not lit.
Once operating timer recording function, the normal VTR operation is not possible unless this button is set to off.

20 CHECK
To check timer programmes while the Timer recording function is on.

21 RECORDING SP/LP
No function.

22 PDC/VPS
To turn the VPS or PDC function on and off.

23 INPUT SELECT
To select the "A1" external recording source.

24 No function.

25 PAL/MESECAM
(No function for NV-SD22EO.)
Set according to the colour TV system used during recording and playback.
When the MESECAM Indicator is lit, the MESECAM system is selected.

26 TRACKING/V-LOCK
For manual tracking adjustment
The + and − buttons are used to adjust the tracking when, for example, noise bars on the picture are better removed manually than by the automatic digital tracking control. After making a manual adjustment, press both buttons together to return to automatic digital tracking control.

For vertical locking adjustment
Use the + and − buttons to minimize any vertical jitter during still-picture playback.

27 Programme Position Selector Buttons
To select the programme positions (1–42).

9: (9)
19: (-/--) → (1) → (9)

28 TRANSMIT
To transmit the data that has been set on the remote controller to the VTR.

29 CANCEL
To cancel the settings made for a timer recording.

30 OFF
To programme a timer recording.

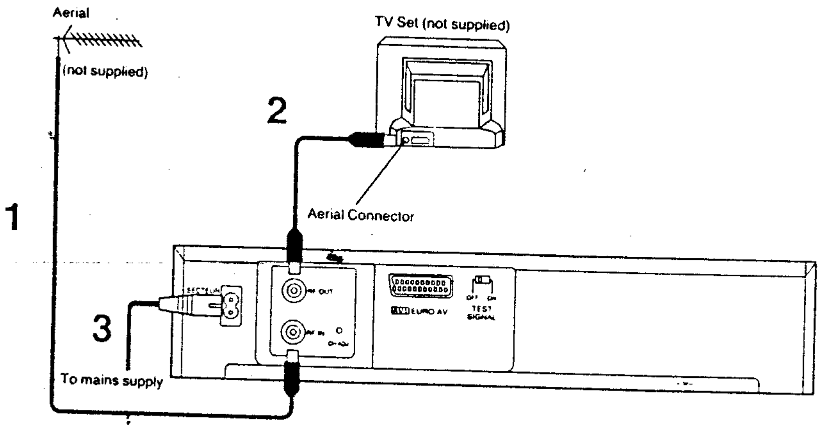
31 ON
To programme a timer recording.

Connections

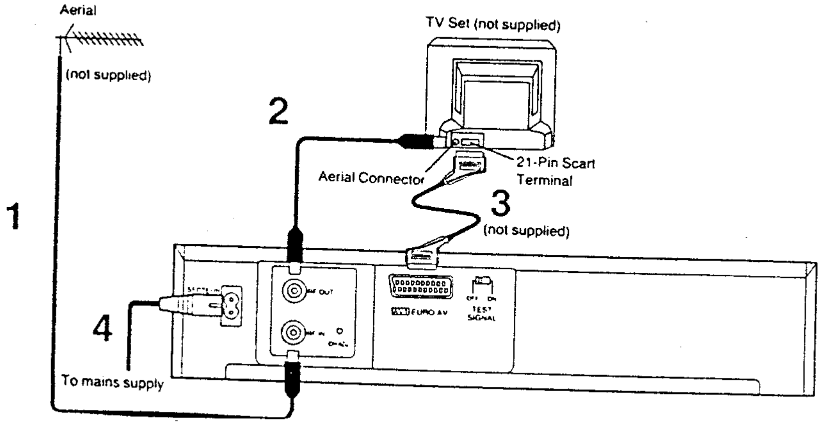
This tells you how to connect the VTR to an aerial, TV, etc.

Basic Connections

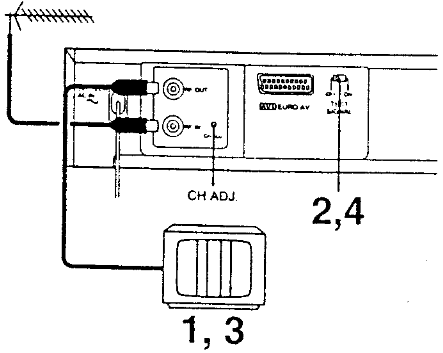
The following connections are required to record and play back the VTR through a TV set:

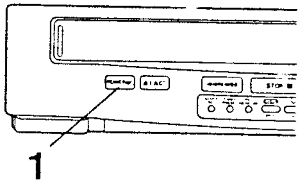

Aerial
(not supplied)
TV Set (not supplied)
2
Aerial Connector
1
3
To mains supply

Connection to a TV Set with 21-Pin Scart Terminal


Aerial
(not supplied)
TV Set (not supplied)
2
Aerial Connector
21-Pin Scart Terminal
3
(not supplied)
1
4
To mains supply

Tuning the TV to your VTR





The VTR supplies a signal to the TV set via the RF coaxial cable on channel 36.
It is possible to view the video picture on your TV in the same way that you watch TV broadcasts.

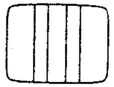
If you have connected the VTR to the TV through the 21-pin scart terminal, then you do not need to follow the procedure mentioned below.

Operations

1 POWER⏻/I Turn on the TV and VTR.

2
OFF ON
TEST
SIGNAL

To generate a test pattern, set **TEST SIGNAL** to ON.

3 

Set the TV to an unused position which you wish to use for your video playback.

4
OFF ON
TEST
SIGNAL

Set **TEST SIGNAL** to OFF.

Note:
The test signal is transmitted on video channel 36. If you are encountering interference from a TV broadcast on this video channel, you may readjust to another free channel (32~40) by using the **CH ADJ.** screw which is located on the rear of the VTR.
Please note that if the **CH ADJ.** screw is used then you will have to retune your TV to the test signal as in item 2 to 4 above.

Setting the Clock of the VTR

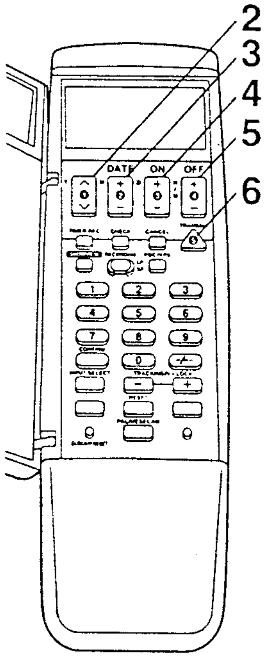
By setting the time on the remote controller's clock and then by transmitting this setting to the VTR, the clocks on both the remote controller and VTR display the same time.
The built-in digital clock employs the 24-hour system.

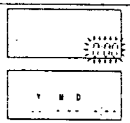
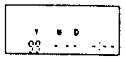
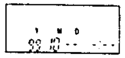
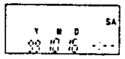
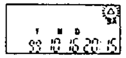
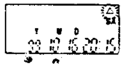
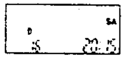
Preparation

- Turn on the VTR.
- Install the batteries in the remote controller. See page 15.

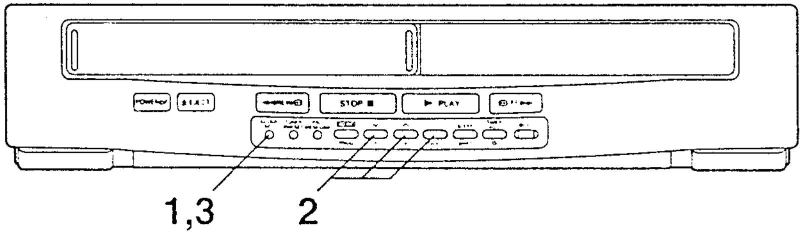
For Example:

Date; 16th, October, 1999
Time; 20:15



Operations	Display Symbols	
1		Open the door of the remote controller.
2		Set Year "99".
3 DATE		Set Month "10".
4 ON		Set Date "16".
5 OFF		Set Time "20:15". • When it is kept pressed, the indication changes in 30-minute steps.
6 TRANSMIT		Press **TRANSMIT**.
7		Close the door of the remote controller.

Note:
To change the previous clock setting, press **CLOCK/PRESET** for at least 2 seconds. The previous clock setting will be displayed. Then follow steps 2 to 7 above.



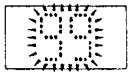
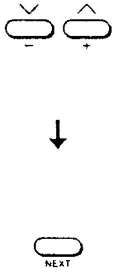
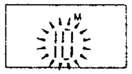
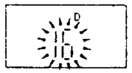
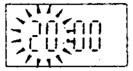
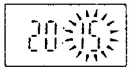
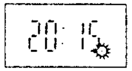
In addition to setting the VTR clock from the remote controller, it can also be set directly from the VTR.
The built-in clock is used to activate the timer for automatic recording and must be set to the correct time.
The built-in digital clock employs the 24-hour system.

Preparation

Turn on the VTR.

For Example:

Date; 16th, October, 1999
Time; 20:15

Operations	Display Symbols	
1 CLOCK SET		Keep **CLOCK SET** pressed for more than 2 seconds.
2 Set each item by pressing + or − and **NEXT**.		Set Year "99".
 − + NEXT		Set Month "10".
		Set Date "16".
		Set Hour "20".
		Set Minute "15". • There is no need to press **NEXT**.
3 CLOCK SET		Press **CLOCK SET**. • The clock will start.

Note:
The clock operates for at least 60 minutes by its backup system in the event of power failure.

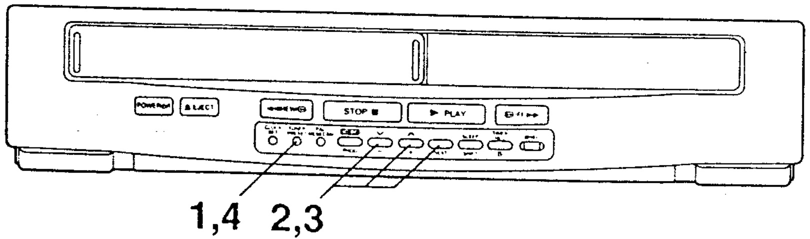
Time Reset Function

If the clock is less than two minutes slow or fast, it can easily be reset to the proper time.

For example:
Resetting the clock to 12:00.00

1 Keep **CLOCK SET** pressed at any time between 11:58.00 and 12:01.59 for more than 2 seconds.
2 Press **CLOCK SET** again as soon as you hear the 12:00.00 time signal.

Storing TV Broadcasts into your VTR



Introduction

The VTR is fitted with its own tuner (just like a normal TV set) and can be pre-set to receive up to 42 TV broadcast stations.

Preparation

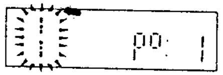
- Confirm that the TV is on and the VTR viewing channel is selected.
- Turn on the VTR and select any programme position except A1.

Operations

Display Symbols

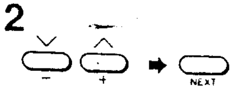
1

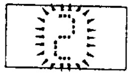
TUNER PRESET



Keep **TUNER PRESET** pressed for more than 2 seconds.

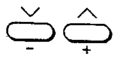
2

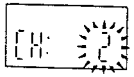




Select the programme position, then press **NEXT**.

3





Search for the required TV station.

- Only NV-SD25EG

  Press **PAL/MESECAM** to select the broadcasting system for the TV station to be tuned.

  PAL: MESECAM indicator should not be lit.

  SECAM: MESECAM indicator should be lit.
- Press **NEXT** and repeat steps **2–3** for each programme position you want to tune to a station.

4

TUNER PRESET

Press **TUNER PRESET** twice.

Fine Tuning Procedure

1 Keep **TUNER PRESET** pressed for more than 2 seconds, and then press again.

2 Press **NEXT**.

3 Press + or − to obtain the best tuning condition.
- "A" Indicator disappears.
- To return the tuning to its former state, press **SHIFT**.

4 Press **TUNER PRESET**.

Blanking of Unoccupied Programme Positions

1 Keep **TUNER PRESET** pressed for more than 2 seconds.

2 Select a programme position which you do not want to tune to a TV station, by using + or −.

3 Press **SHIFT**. ("−−" is displayed.)
- Repeat steps **2** and **3** for another unoccupied programme positions to skip during the selection of the programme positions.
- To cancel the blanking of a programme position, select that programme position on the VTR and then press **SHIFT**.

4 Press **TUNER PRESET** twice.

Channel Plan

Channel Indication	TV Channel	
	Germany/Italy	Other Countries
2–12	*E2–E12	E2–E12
13–20	A–H (Only Italy)	——
21–69	21–69	21–69
74–76	——	S1–S3
80–82	——	M1–M3
83–89	S4–S10	M4–M10
90–99	S11–S20	U1–U10
121–141	**S21–S41 (Only Italy)	S21–S41

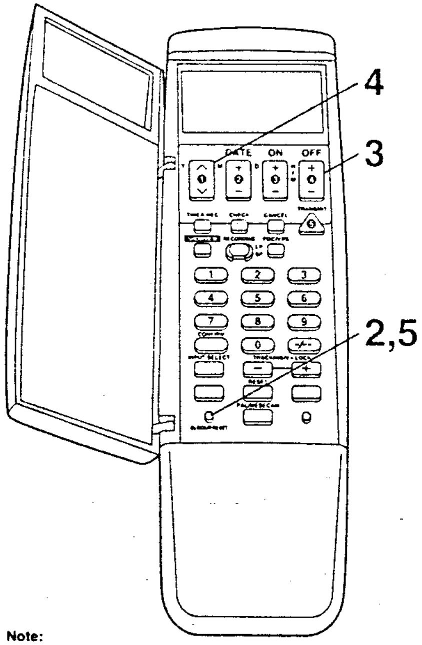
*In Italy: H1...(11), H2...(12)

**Only for 8 MHz channel raster

Preparations for ShowView programming

Setting Up the Remote Controller for the ShowView Programming

This remote controller uses specially designated numbers called "guide numbers" to differentiate between the TV stations. Before programming using the ShowView numbers, you must enter the guide numbers of the TV stations to be viewed and the programme positions at which those TV stations are received on the VTR into the remote controller. Have a newspaper or magazine at hand which lists the TV station guide numbers and ShowView numbers.



Note:

To receive satellite stations, the satellite receiver must be connected to the VTR and programme position must be set depending on the type of the connection made.

A1: When the satellite receiver is connected to the EURO AV socket

- When the satellite receiver is connected by means of the RF coaxial cable, set to a free programme position between 1 and 42.

Preparation

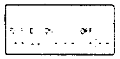
Set the clock of the remote controller first.

For example:

TV Station	Guide Number	Programme Position
ARD	001	1
ZDF	002	2
RTL PLUS	004	4
SAT1	005	3
⋮	⋮	⋮

Operations **Display Symbols**

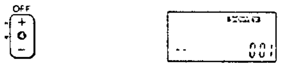
1 Open the door of the remote controller.



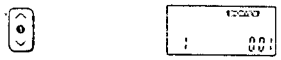
2 Keep **CLOCK/PRESET** pressed for more than 2 seconds and then press it again.

CLOCK/PRESET
-- 001

3 Select the guide number (001–255).



4 Select the programme position (1–42, A1).



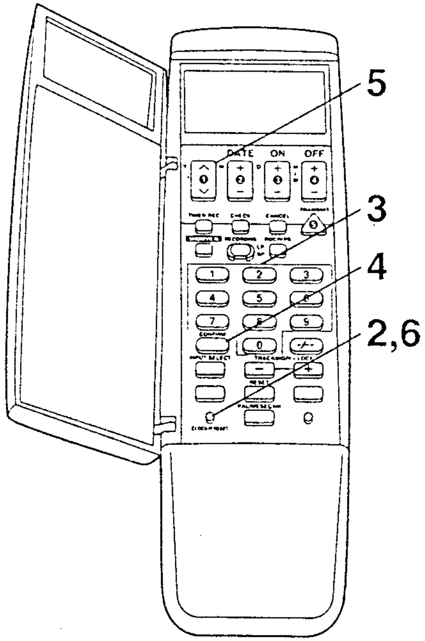
- To set the other TV stations, repeat steps 3 and 4.

5 Press **CLOCK/PRESET** twice.

CLOCK/PRESET

6 Close the door of the remote controller.

If you do not know the guide number of a programme for which a ShowView number is supplied, you can determine the guide number by proceeding as follows:



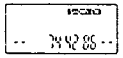
Operations **Display Symbols**

1 Open the door of the remote controller.

2 Keep **CLOCK/PRESET** pressed for more than 2 seconds and then press it again.

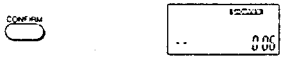
CLOCK/PRESET
-- 001

3 Enter a ShowView number.
Example: 744286

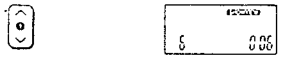


- If you have entered the wrong number, press **CANCEL** and then enter the proper number.

4 Press **CONFIRM** to set the guide number.



5 Select the programme position (1–42, A1).



- To set the other TV stations, repeat steps 3 and 5.

6 Press **CLOCK/PRESET** twice.

CLOCK/PRESET

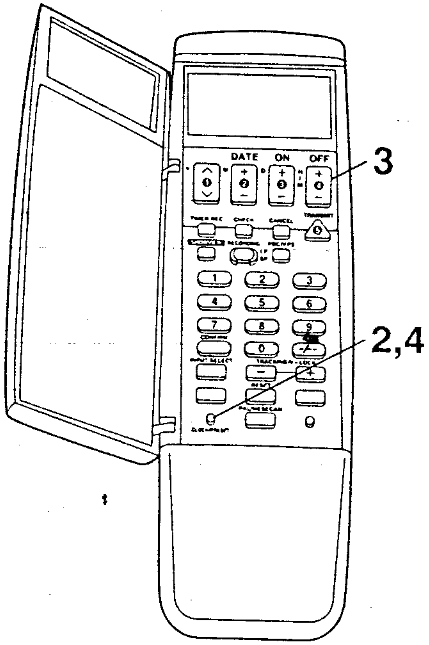
7 Close the door of the remote controller.

Note:

Enter ShowView numbers which are ahead of the present time. Otherwise, they will not be set into the proper guide numbers.

Setting the Brand of your TV in the Remote Controller

This remote controller can be used to operate 4 brands of TV sets.



Brand No.	Manufacturer
1	Panasonic
2	
3	
4	
5	GRUNDIG/Blaupunkt
6	PHILIPS
7	SONY

Preparation

- Turn on the TV.
- Install the batteries in the remote controller. See page 15.

Operations **Display Symbols**

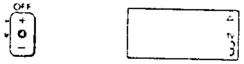
1 Open the door of the remote controller.

2 Keep **CLOCK/PRESET** pressed for more than 2 seconds and then press it twice.

CLOCK/PRESET

- "TV" now appears on the remote controller's display.

3 Press **OFF** several times.



- When the brand number matches the make of your TV, the TV's power is turned off.

4 Press **CLOCK/PRESET.**

CLOCK/PRESET

5 Close the door the remote controller.

How to change the brand number
Each time the "+" side of **OFF** is pressed, the number is counted up by one as follows:

→1→2→3...7→

When the "−" side is pressed, the number is counted down by one in the reverse order to that indicated above.

Note:
Some TV models cannot be operated using this remote controller.

When the brand number is 1, 2, 3 or 4:
When the TV's power is turned off in step 3 above, turn it back on and adjust the TV's volume. The volume can be adjusted if the brand number matches the make of TV.
If it is not possible to adjust the TV's volume, try setting the brand number (1 to 4) to match the make of TV again until the volume can be adjusted.

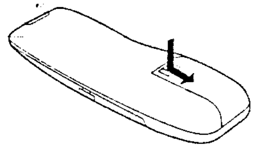
Power Source for the Remote Controller

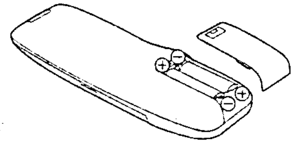
The remote controller is powered by 2 "AA", "UM3" or "R6" size batteries. The life of the batteries is about one year, although this depends on the frequency of use.

Precautions for Battery Replacement

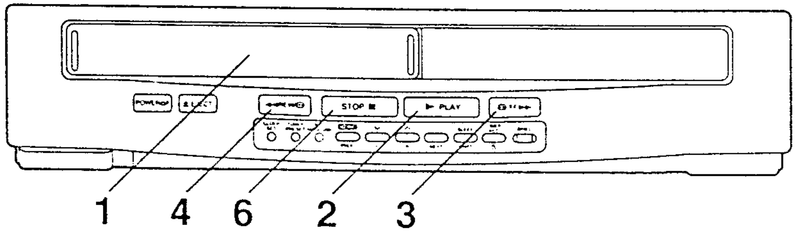
- Load the new batteries with their polarity (⊕ and ⊖) aligned correctly.
- Do not apply heat to the batteries, or an internal short-circuit may occur.
- If you do not intend to use the remote controller for a long period of time, remove the batteries and store them in a cool and dry place.
- Remove spent batteries immediately and dispose of them.
- Do not use an old and a new battery together, and never use an alkaline battery with a manganese battery.

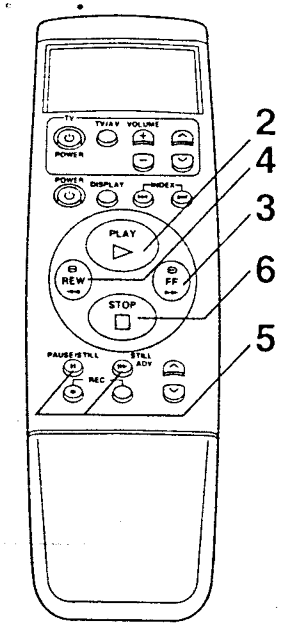
Installing the Batteries

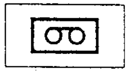
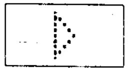
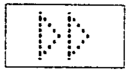
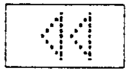
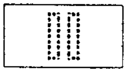




Playback



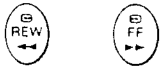


Operations	Display Symbols	
1		Insert a recorded cassette tape.
2 PLAY ▷		Start viewing the picture.
3 FF ►►		Search forward by tapping FF. • To change back to normal playback, press **PLAY**.
4 REW ◄◄		Search backward by tapping REW. • To change back to normal playback, press **PLAY**.
5 PAUSE/STILL ↓ STILL ADV		View a still picture. • To advance one frame of the still picture, press **STILL ADV**. • To continue the normal playback, press **PLAY** or **PAUSE/STILL**.
6 STOP □		Stop viewing the picture.

Other Playback Functions

To obtain High Speed Picture During Fast Forward or Rewind

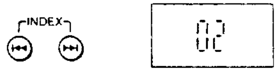
Keep FF pressed during fast forward.
Keep REW pressed during rewind.



To find the Beginning of Each Recording

For example:
Searching for the 2nd recorded segment in the forward direction.

Press **INDEX ►►|** twice.



- After finding the specific recorded segment, playback starts automatically.
- For the reverse direction, press **INDEX |◄◄**.
- Up to 20 index signals can be searched for in both directions.
- The figure on the display is decremented by 1 each time an index signal is ·ated.

Recording Index Signals
Index signals are recorded in following cases.
- When a recording is started by pressing **REC**
- When **REC** is pressed during recording
- When timer recording is activated

Note:
- Only NV-SD25EG
  During Playback, set **PAL/MESECAM.**
  PAL: : When playing back a tape recorded in the PAL system
  MESECAM: When playing back a tape recorded in the MESECAM system
  MESECAM indicator lights up.
- Cue or review playback will be automatically released after 10 minutes, and still playback after 5 minutes.
- The INDEX search function can only work correctly, if the index signals are spaced at least 3 minutes apart.

Other Automatic Functions

Automatic Playback

When a cassette without an erasure prevention tab is inserted, the VTR starts playback automatically.

VTR-off Playback

When the VTR is off, an inserted cassette can be played back by pressing **PLAY**.

Automatic Rewinding

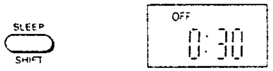
When the tape reaches its end during recording (except for timer recording) or playback, it will automatically be rewound to the beginning.

Automatic Switching Off and Ejection

When the VTR is switched off, an inserted cassette can be ejected simply by pressing **EJECT**. The VTR will eject the cassette and automatically turn itself off again.

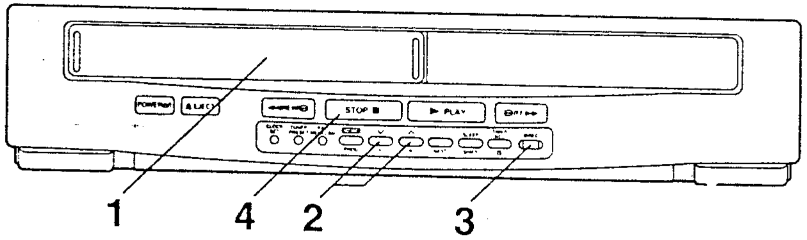
Automatic VTR off time setting

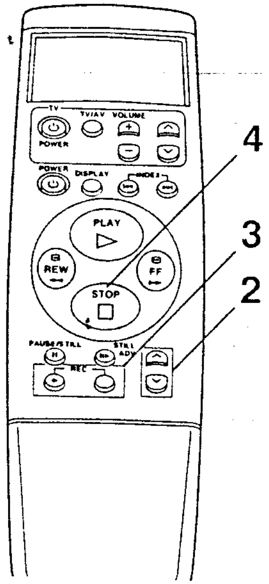
Press **SLEEP** for the desired time.

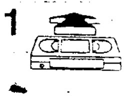
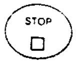


- Each press gives a 30 minutes time span up to 9 hours.
- To cancel the setting time, press **SLEEP** repeatedly to set 0:00.

On-the-spot Recording



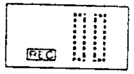


	Operations	Display Symbols	
1			Insert a cassette tape. • If it has already been inserted, press **POWER** to turn the VTR on.
2			Select TV station.
3	REC	REC	Start recording.
4	 STOP		Stop recording.

To interrupt Recording

Press **PAUSE/STILL** during recording.
Press again to continue recording.

PAUSE/STILL



To record One TV Programme while Viewing Another Programme

1 Refer to the on-the-spot recording operations steps 1 to 3.

2 Select the TV programme on your TV set you wish to view at the present time.

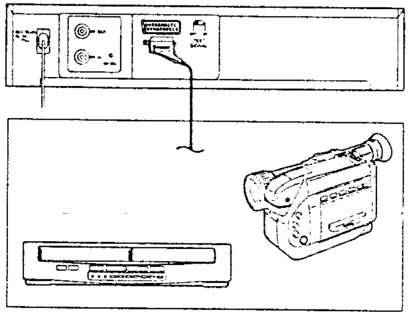
Notes:

- When a video cassette with a broken off tab is inserted, the "σo" indication will flash to indicate that recording is not possible.
- The recording pause mode will be automatically released after 5 minutes, and be back to the stop mode.

Assembly Editing

This function can be used to make up an edited tape from other recordings or video sources.

This enables you to record a new segment immediately after a previously recorded segment.



Preparation

- Connect a movie camera or another VTR to this VTR as shown.
- Insert a recorded cassette tape with an intact erasure prevention tab.
- Select the video source required by pressing **INPUT SELECT** to set A1.
- Only NV-SD25EG
  Set **PAL/MESECAM** according to the colour TV system of the video source.
  PAL: When receiving PAL signals
  MESECAM: When receiving SECAM/MESECAM signals
  The MESECAM indicator lights up.

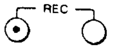
Operations

1 Search for the end of the previous recording.

2 Press **PAUSE/STILL.**

PAUSE/STILL

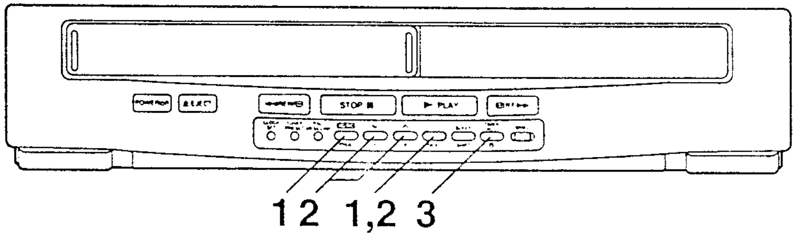
3 Press **REC** to switch the VTR from the pause mode to the recording standby mode.



4 Start the new recording by pressing **PAUSE/STILL** again.

PAUSE/STILL

Timer Recording



Up to 8 timer programmes can be recorded up to one month in advance by setting the timer.

Preparation

Insert a cassette tape with an intact erasure prevention tab.

For Example:

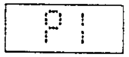
Timer Programme number;	1
Programme position (channel);	2
Date;	27th, October
Starting time;	20:02
Ending time;	21:30

(Present date; 16th October)

Operations

Display Symbols

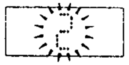
1
CHECK
PROG
NEXT



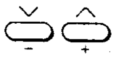
Select **Timer Programme number** "1", and then press **NEXT**.

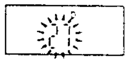
P1 --------: When nothing is programmed
P1 : When something has already been programmed

2 Set each items by pressing + or – and **NEXT**.

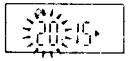


Set **Programme position** (channel) "2".

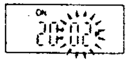




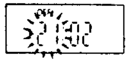
Set **Date** "27".



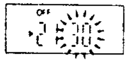
Set **Starting time** (hour) "20".



Set **Starting time** (minute) "02".



Set **Ending time** (hour) "21".



Set **Ending time** (minute) "30".
- There is no need to press **NEXT**.

3

To activate timer recording, press **TIMER REC**.

Timer Recording from External Signal Source

If Timer Recording is performed by a unit connected to the Euro AV socket, select the A1 indicator for the programme position.

Setting other Programmes in Succession

Repeat steps **1** and **2**.

Checking a Timer Programme

Select the timer programme number to be checked by pressing **CHECK/PROG** while the timer recording function is on.

Cancelling a Timer Programme

1 Press **TIMER REC** to turn off the timer recording function.

2 Select the timer programme number to be canceled by pressing **CHECK/PROG**.

3 Press + and – simultaneously for more than 3 seconds.

Note:

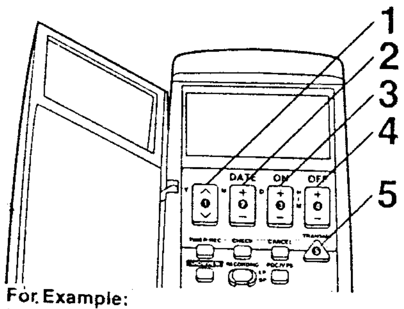
If a timer recording is not performed to the end (due to insufficient tape or cancellation by the user), the programmed timer recording data will be cancelled from the memory by 4 a.m. two days later.
However, if the Timer Record Function is activated at that time, the programmed timer recording data will be cancelled at 4 a.m. the next day.

PDC (Programme Delivery Control)/VPS (Video Programme System)

The Video Programme System (VPS) or the Programme Delivery Control (PDC) is a very convenient system which assures that the TV programmes you have programmed for timer recording will be recorded exactly from beginning to end, even if the actual broadcasting time differs from the scheduled time due to delayed start or extension of the programme duration. Also, if a programme is interrupted and, for example, some special news are inserted, the recording will also be interrupted automatically and resumed when the programme continues.

- **EG model: VPS function is provided.**
  PDC function is optional.*
  EO model: VPS/PDC function is optional.*
  *The VPS (PDC) function becomes operative when the VTR is equipped with the optional VPS (PDC) decoder. Consult your authorized video dealer.
- Press **SHIFT** in step 2 to cancel the VPS (PDC) function.
- In the case of VPS (PDC) recording, use the **correct** time (VPS/PDC time) for recording the TV programmes. VPS (PDC) recording is not performed when the time (VPS/PDC time) is incorrect, even if only by one minute.
- If the actual broadcasting times of timer recordings overlap (regardless of whether they are VPS/PDC-controlled), the recording that starts first has always priority, and the recording of the later beginning programme will start only after the first timer recording has finished.
- When the VPS (PDC) signal drops out because the broadcast signal is weak, or when a broadcasting station does not transmit a regular VPS (PDC) signal, the timer recording will be performed in the normal mode (without VPS/PDC) even if it was programmed for VPS (PDC).
  In this case, even if the timer recording is performed, whatever has been programmed will not be cancelled at that particular time but at 4 a.m. on the following day.

Using the Remote Controller



For Example:

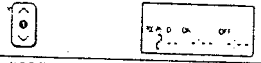
Programme position (channel);	2
Date;	27th, October
Starting time;	20:02
Ending time;	21:30

Preparation

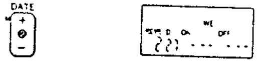
- Insert a cassette tape with an intact erasure prevention tab.
- Open the door of the remote controller.

Operations **Display Symbols**

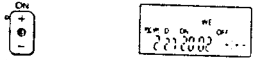
1 Set Programme position (channel) "2".



2 Set Date "27".

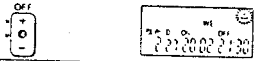


3 Set Starting time "20:02".



- When it is kept pressed, the indication changes in 30-minute steps.

4 Set Ending time "21:30".

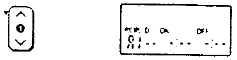


5 Press **TRANSMIT**.

6 Close the door of the remote controller.

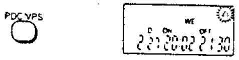
Timer Recording from External Signal Source

If Timer Recording is performed by a unit connected to the Euro AV socket, select the A1 indicator in step 1 for the programme position.



Turning VPS/PDC function on and off

Press **PDC/VPS** in any of steps 1–4.



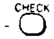
Checking a Timer Programme

- The timer recording indicator "⊡" is lit.

Press **CHECK** repeatedly until the desired timer programme number is displayed.

Cancelling a Timer Programme

1 Press **CHECK** repeatedly until the desired timer programme number is displayed.

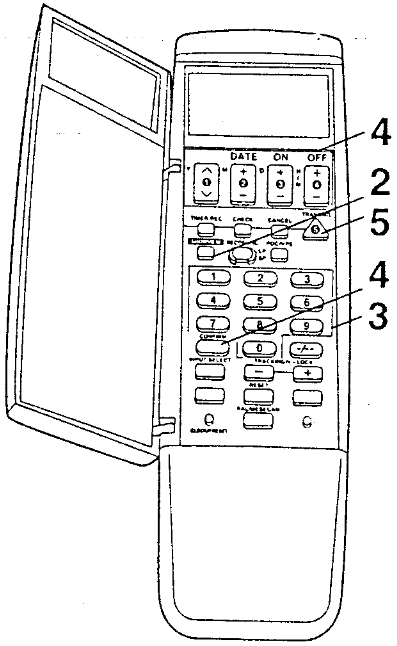


2 Press **CANCEL**.

ShowView Programming

Programming is now easier than ever: simply enter the ShowView number provided in the programme schedule column carried by newspapers and magazines.

ShowView numbers are numbers which are assigned to each programme listed in the TV programme schedule carried in newspapers and TV guides. When these numbers are entered and **TRANSMIT** is pressed, the numbers are converted into the actual programming and sent to the VTR.

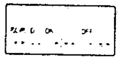


Preparation

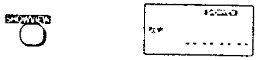
- Insert a cassette tape with an intact erasure prevention tab.
- Set the programme positions on both the VTR and remote controller as shown on pages 10–13.

Operations **Display Symbols**

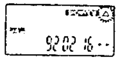
1 Open the door of the remote controller.



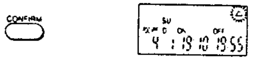
2 Press **SHOWVIEW**.



3 Enter a ShowView number.
Example: 920216



4 Press **CONFIRM** to check that the number corresponds to the right programme.



- To make any corrections, use buttons ①~④.

5 Press **TRANSMIT**.

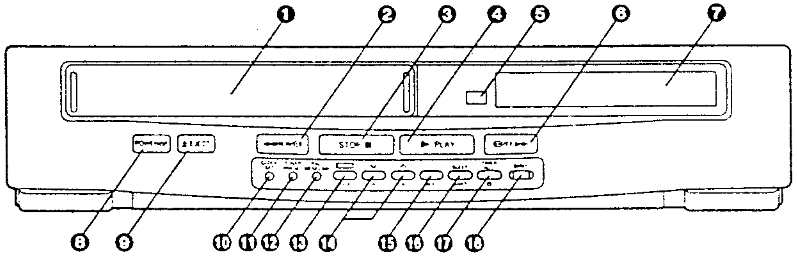
6 Close the door of the remote controller.

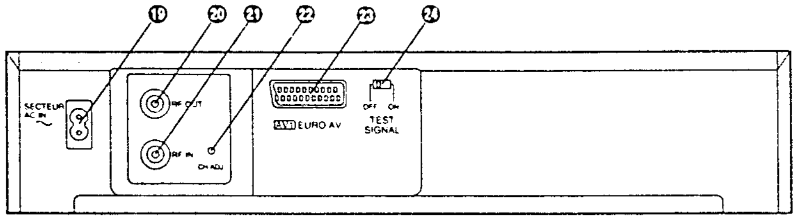
Notes:

- To turn VPS/PDC function on and off, press **PDC/VPS** in any of steps 2–4.
- When the ShowView number is used for programming, the recording time may be slightly longer than the actual programme time.
- Repeat steps 2 to 4 if "Err" appears on the remote controller.
- When programming two or more programmes, repeat steps 2 to 5 after pressing **TRANSMIT**.
- The procedures for checking and canceling whatever has been programmed are the same as for remote control programming.

Controls and Connection Sockets

This gives a detailed explanation of the function of each button, switch and connection socket.





❶ **Cassette Compartment**
Insert a video cassette here.

❷ **REW (REWIND)**
In the stop mode: To rewind the tape.
In the playback mode: To search backward.
In the rewind mode: To obtain high speed picture.
"◁◁" is lit.

❸ **STOP**
To stop any playback or recording.

❹ **PLAY**
To start playback. "▷" is lit.

❺ **Infra-red Remote Control Receiver Window**

❻ **FF (FAST FORWARD)**
In the stop mode: To fast forward the tape.
In the playback mode: To search forward.
In the fast forward mode: To obtain high speed picture.
"▷▷" is lit.

❼ **Display**

❽ **POWER ⏻/I**
Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still connected to the mains.

❾ **EJECT**
To eject a video cassette.

⑩ **CLOCK SET**
To set the time.

⑪ **TUNER PRESET**
To initiate TV station settings for the tuner.

⑫ **PAL/MESECAM (Only NV-SD25EG)**
Set according to the colour TV system used during recording and playback.
When the MESECAM indicator is lit, the MESECAM system is selected.

⑬ **CHECK/PROG**
To display details of preset timer recording while the timer recording function is on.
To select a timer programme number.
"P1, P2, P3…or P8" is lit.

⑭ **∨ ∧/− +**
To select the required programme position (TV station).
To set the clock and timer recording.

⑮ **NEXT**
To proceed to the next item during setting procedure.

⑯ **SLEEP/SHIFT**
To set the time to turn off the VTR automatically.
To blank unoccupied programme position.

⑰ **TIMER REC**
To turn the timer recording function on and off.
⌚ is lit or not lit.
Once operating timer recording function, the normal VTR operation is not possible unless this button is set to off.

⑱ **REC**
To start a recording.

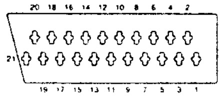
⑲ **AC IN~**
To connect to the main power supply.

⑳ **RF OUT**
To connect to the aerial terminal on a TV set.

㉑ **RF IN**
To connect to the external aerial.

㉒ **CH ADJ.**
To adjust the RF transmitting channel 32~40.

㉓ **EURO AV**
This 21-pin scart terminal carries input and output signals for both picture and sound. TV sets equipped with a similar socket can be connected here.
This is also called Scart
Peritel
Euro Connector
Euro AV

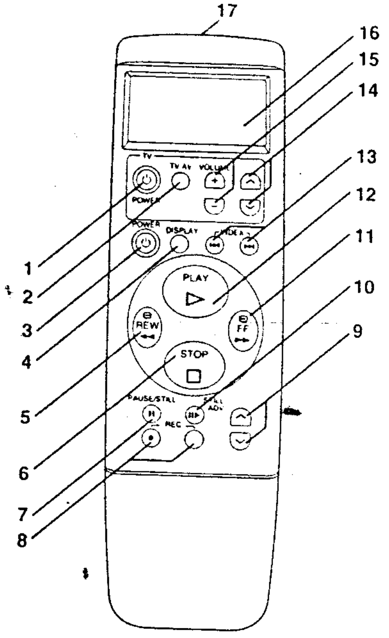


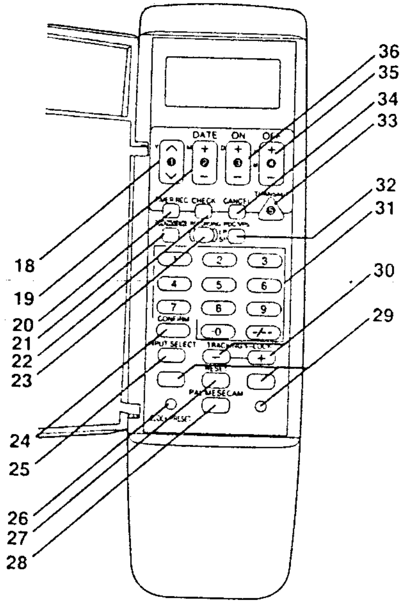
1 AUDIO OUTPUT
2 AUDIO INPUT
3 AUDIO OUTPUT
4 AUDIO GROUND
6 AUDIO INPUT
8 SWITCHING VOLTAGE
17 VIDEO GROUND
19 VIDEO OUTPUT
20 VIDEO INPUT
21 GROUND

No connection: 5, 7, 9, 10, 11, 12, 13, 14, 15, 16, 18

㉔ **TEST SIGNAL**
The test signal is transmitted on channel 36.

Infra-red Remote Controller





1 **POWER (TV)**
Press to switch the TV from on to standby mode or vice versa. In standby mode, the TV is still connected to the mains.
- With some TV models, it may only be possible to switch the TV to standby mode using this button.

2 **TV/AV**
To select the TV input.

3 **POWER**
Press to switch the VTR from on to standby mode or vice versa. In standby mode, the VTR is still connecied to the mains.

4 **DISPLAY**
To change the indication on the VTR Display.

┌→Clock→Counter─┐

5 **REW (REWIND)**

In the stop mode:	To rewind the tape
In the playback mode:	To search backward
In the rewind mode:	To obtain high speed picture

"◁◁" is lit.

6 **STOP**
To stop any playback or recording.

7 **PAUSE/STILL**

During playback:	Still picture
During recording:	To interrupt recording.

8 **REC**
To start a recording.
- Press both buttons simultaneously.

9 **∨ ∧ (VTR)**
To select the required programme position (TV station) of the VTR.

10 **STILL ADV**
To advance a still picture during still playback.

11 **FF (FAST FORWARD)**

In the stop mode:	To fast forward the tape
In the playback mode:	To search forward
In the fast forward mode:	To obtain high speed picture

"▷▷" is lit.

12 **PLAY**
To start playback. "▷" is lit.

13 **INDEX**
For the index search function.

14 **∨ ∧ (TV)**
To select the required programme position (TV station) of the TV.

15 **VOLUME**
To adjust the volume of the TV.

16 **Display**

17 **Infra-red Transmitter**
The programming data are transmitted from here to the VTR.

18 **∧ ∨ (Y)**
- To programme a timer recording.
- To set the clock.

19 **DATE (M)**
- To programme a timer recording.
- To set the clock.

20 **TIMER REC**
To turn the timer recording function on and off.
⏲ is lit or not lit.
Once operating timer recording function, the normal VTR operation is not possible unless this button is set to off.

21 **SHOWVIEW**
For the ShowView programming.

22 **CHECK**
To check timer programmes while the Timer recording function is on.

23 **RECORDING SP/LP**
No function.

24 **CONFIRM**
To convert the data of a ShowView number.

25 **INPUT SELECT**
To select the "A1" external recording source.

26 **CLOCK/PRESET**
- To set the clock.
- To set the TV stations.
- To set the brand number of the TV.

27 **RESET**
To reset the tape counter (elapsed time) to "0:00.00".
- The tape counter is automatically reset to "0:00.00" when a video cassette is inserted.

28 **PAL/MESECAM**
(No function for NV-SD25EO.)
Set according to the colour TV system used during recording and playback.
When the MESECAM Indicator is lit, the MESECAM system is selected.

29 No function.

30 **TRACKING/V-LOCK**
For manual tracking adjustment
The + and − buttons are used to adjust the tracking when, for example, noise bars on the picture are better removed manually than by the automatic digital tracking control. After making a manual adjustment, press both buttons together to return to automatic digital tracking control.

For vertical locking adjustment
Use the + and − buttons to minimize any vertical jitter during still-picture playback.

31 **Programme Position Selector Buttons**
- To select the programme positions (1–42).

9: (9)
19: (-/--)→(1)→(9)

- To programme a ShowView number.

32 **PDC/VPS**
To turn the VPS or PDC function on and off.

33 **TRANSMIT**
To transmit the data that has been set on the remote controller to the VTR.

34 **CANCEL**
To cancel the settings made for a timer recording.

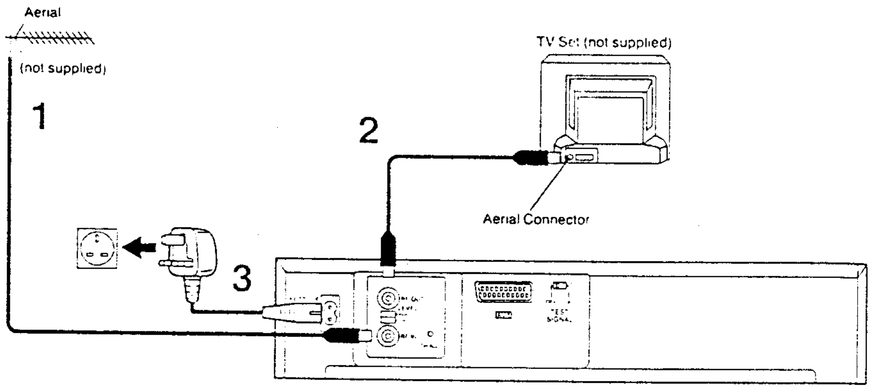
35 **OFF (H/M)**
- To programme a timer recording.
- To set the clock.

36 **ON (D)**
- To programme a timer recording.
- To set the clock.

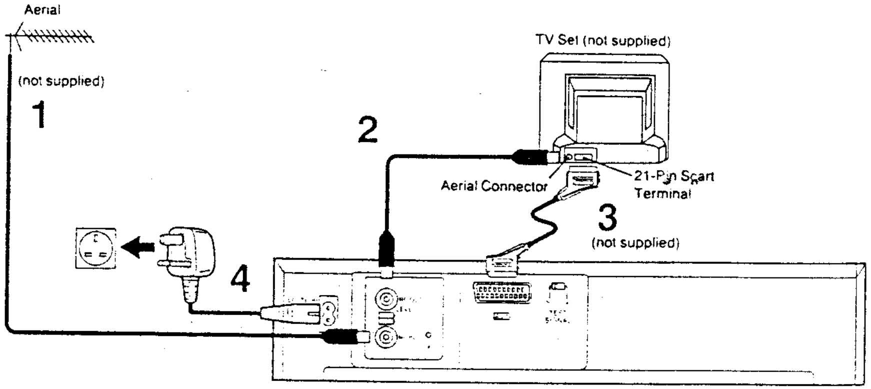
Connections

Basic Connections

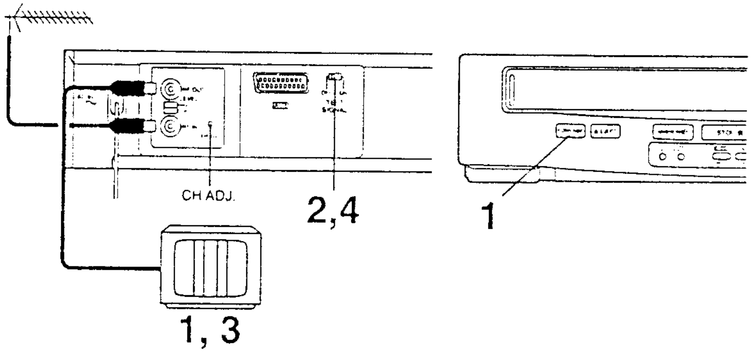
The following connections are required to record and play back the VTR through a TV set:


Aerial
(not supplied)
1
TV Set (not supplied)
2
Aerial Connector
3

Connection to a TV Set with 21-Pin Scart Terminal


Aerial
(not supplied)
1
TV Set (not supplied)
2
Aerial Connector
21-Pin Scart Terminal
3
(not supplied)
4

Tuning the TV to your VTR


CH ADJ.
2,4
1
1, 3

It is possible to view the video picture on your TV in the same way that you watch TV broadcasts.

If you have connected the VTR to the TV through the 21-pin scart terminal, then you do not need to follow the procedure mentioned below.

Preparation

- Turn on the TV.
- Refer to the operating instruction of the TV set and carry out tuning/preset procedure.

Operations

1

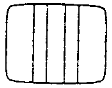
Turn on the VTR.

2

OFF ON
TEST SIGNAL

To generate a test pattern, set **TEST SIGNAL** to ON.

3



Set the TV to an unused position which you wish to use for your video playback.

- Tune the TV until the test pattern appears on the screen.
- On Panasonic TV the programme number 0 should be selected to obtain best performance.

4

OFF ON
TEST SIGNAL

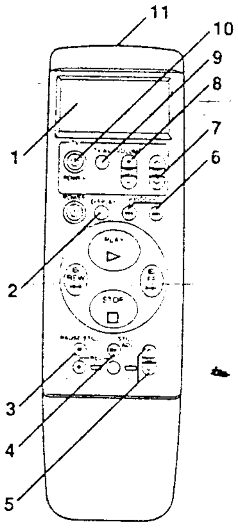
Set **TEST SIGNAL** to OFF.

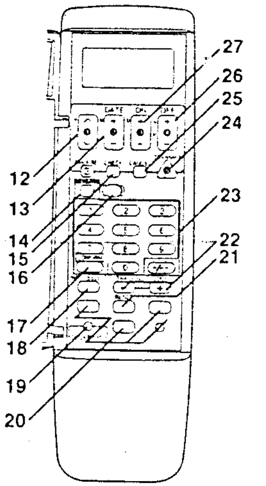
Note:

The test signal is transmitted on channel 36 of the UK broadcasting channels. If you are encountering interference from another broadcast on the video channel, you may readjust to a free channel by using the **CH ADJ.** screw which is located on the rear of the VTR

Please note that if the **CH ADJ.** screw is used then you will have to retune your TV to the test signal as in item 2 to 4 above.

Infra-red Remote Controller





1 **Display**

2 **DISPLAY**
To change the indication on the VTR Display.

→Clock→Counter→

3 **PAUSE/STILL**
During playback: Still picture.
During recording: To interrupt recording.

4 **STILL ADV**
To advance a still picture during still playback.

5 ∨ ∧
To select the required programme position (TV station) and AV external signal source
∧ Button: →1, 2, 3 .... 42, A1→
∨ Button: →A1, 42 .... 3, 2, 1→

6 **INDEX**
For the index search function.

7 ∨ ∧ (TV)
To select the required programme position (TV station) of the TV.

8 **VOLUME**
To adjust the volume of the TV.

9 **TV/AV**
To select the TV input.

10 **POWER (TV)**
To switch the TV from on to standby mode or vice versa. In standby mode, the TV is still connected to the mains.
- With some TV models, it may only be possible to switch the TV to standby mode using this button.

11 **Infra-red Transmitter**
The programming data are transmitted from here to the VTR.

12 ∨ ∧ (Y)
- To programme a timer recording.
- To set the clock.

13 **DATE (M)**
- To programme a timer recording.
- To set the clock.

14 **VIDEO PLUS+**
For the ShowView programming.

15 **CHECK**
To check timer programmes.

16 **No Function**

17 **CONFIRM**

18 **INPUT SELECT**
To select the "A1" external recording source.

19 **CLOCK/PRESET**
- To set the clock.
- To set the satellite position.
- To set the brand number of the TV.

20 **No Function**

21 **RESET**
To reset the tape counter (elapsed time) to "0:00.00".
- The tape counter is automatically reset to "0:00.00" when a video cassette is inserted.

22 **TRACKING/V-LOCK**
For manual tracking adjustment
The + and – buttons are used to adjust the tracking when, for example, noise bars on the picture are better removed manually than by the automatic digital tracking control. After making a manual adjustment, press both buttons together to return to automatic digital tracking control.

For vertical locking adjustment
Use the + and – buttons to minimize any vertical jitter during still-picture playback.

23 **Programme Position Selector Buttons**
- To select the programme positions.

9: (9)

19: (-/--)→(1)→(9)

- To enter a PlusCode.

24 **TRANSMIT**
To transmit the data that has been set on the remote controller to the VTR.

25 **CANCEL**
To cancel the settings made for a timer recording.

26 **OFF (H/M)**
- To programme a timer recording.
- To set the clock.
- To set the brand number of the TV.
- To set the guide number.
- To set the satellite position.

27 **ON (D)**
- To programme a timer recording.
- To set the clock.

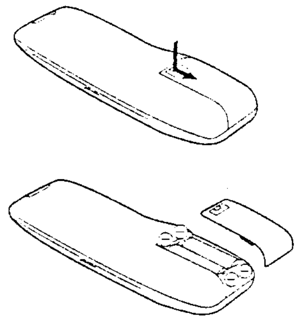
Power Source for the Remote Controller

The remote controller is powered by 2 "UM3" or "R6" size batteries. The life of the batteries is about one year, although this depends on the frequency of use.

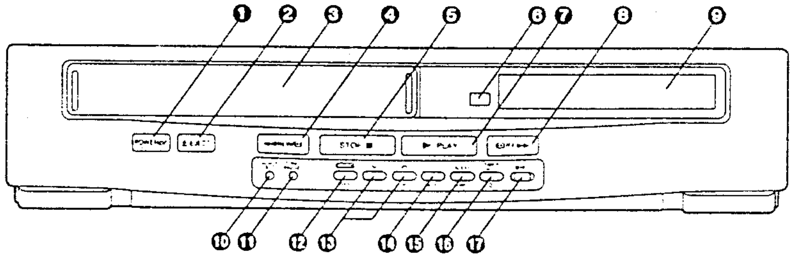
Precautions for Battery Replacement

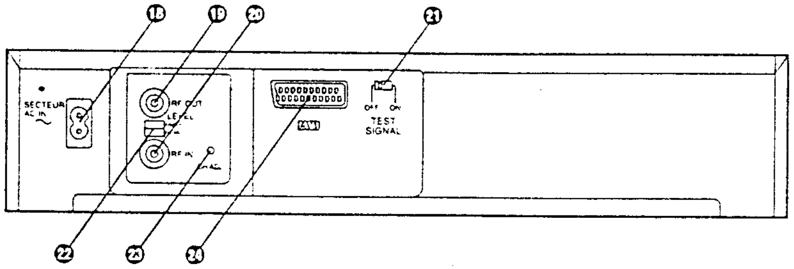
- Load the new batteries with their polarity (⊕ and ⊖) aligned correctly.
- Do not apply heat to the batteries, or an internal short-circuit may occur.
- If you do not intend to use the remote controller for a long period of time, remove the batteries and store them in a cool and dry place.
- Remove spent batteries immediately and dispose of them.
- Do not use an old and a new battery together, and never use an alkaline battery with a manganese battery.

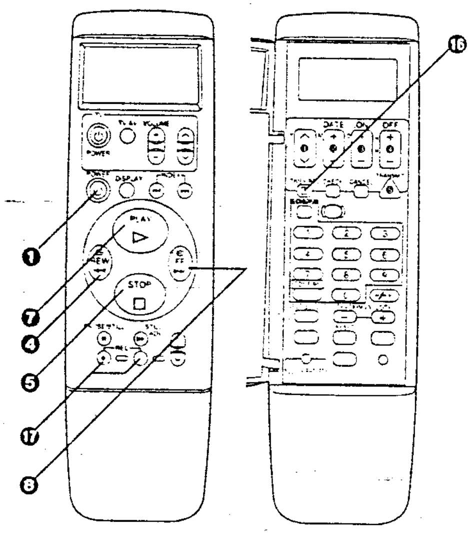
[illegible] the Batteries



Controls and Connection Sockets







① POWER ⏻/I

Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still connected to the mains.

② EJECT

To eject a video cassette.

③ **Cassette Compartment**

Insert a video cassette here.

④ REW (REWIND)

In the stop mode:	To rewind the tape.
In the playback mode:	To search backward.
In the rewind mode:	To obtain high speed picture.

"◁◁" is lit.

⑤ STOP

To stop any playback or recording.

⑥ **Infra-red Remote Control Receiver Window**

⑦ PLAY

To start playback. "▷" is lit.

⑧ FF (FAST FORWARD)

In the stop mode:	To fast forward the tape.
In the playback mode:	To search forward.
In the fast forward mode:	To obtain high speed picture.

"▷▷" is lit.

⑨ **Display**

⑩ CLOCK SET

To set the time.

⑪ TUNER PRESET

To initiate TV station settings for the tuner.

⑫ CHECK/PROG

To select a timer programme number.
"P1, P2, P3...P8" is lit.
To display details of preset timer recording while the timer recording function is on.

⑬ ∨ ∧/− +

To select the required programme position (TV station) and AV external signal source.
∧ Button: →1, 2, 3 .... 42, A1→
∨ Button: →A1, 42 .... 3, 2, 1→

To set the clock and timer recording.

⑭ NEXT

To select the tape speed required for recording

⑮ SLEEP/SHIFT

To set the time to turn off the VTR automatically.
To memorize programme position.

⑯ TIMER REC

To turn the timer recording function on and off.
🕒 is lit or not lit.
Once activating timer recording function, the normal VTR operation is not possible unless this button is set off.

⑰ REC

To start a recording.

⑱ AC IN~

To connect to the main power supply.

⑲ RF OUT

To connect to the aerial terminal on a TV set.

⑳ RF IN

To connect to the external aerial.

㉑ TEST SIGNAL

The test signal is transmitted on channel 36.

㉒ LEVEL

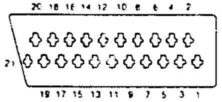
Used to adjust the UHF aerial signal strength.
HIGH: For normal position.
LOW: If a diagonal pattern or stripes appear on the picture.

㉓ CH ADJ.

To adjust the RF transmitting channel 30~42.

㉔ AV1

This 21-pin scart terminal carries input and output signals for both picture and sound. TV sets equipped with a similar socket can be connected here.
This is also called Scart
Peritel
Euro Connector
Euro AV



1	AUDIO OUTPUT	8	SWITCHING VOLTAGE
2	AUDIO INPUT	17	VIDEO GROUND
3	AUDIO OUTPUT	19	VIDEO OUTPUT
4	AUDIO GROUND	20	VIDEO INPUT
6	AUDIO INPUT	21	GROUND

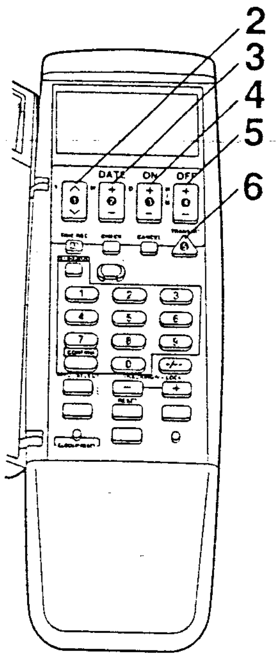
No connection; 5, 7, 9, 10, 11, 12, 13, 14, 15, 16, 18

Setting the Clock of the VTR using the Remote Controller

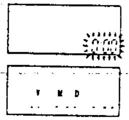
By setting the time on the remote controller's clock and then by transmitting this setting to the VTR, the clocks on both the remote controller and VTR display the same time.
The built-in digital clock employs the 24-hour system.

Preparation
- Turn on the VTR.
- Install the batteries in the remote controller. See page 11

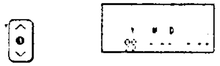
For Example:
Date; 16th, October, 1999
Time; 20:15



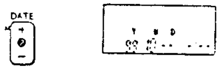
Operations **Display Symbols**

1


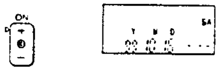
Open the door of the remote controller.

2


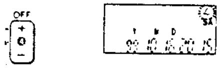
Set Year "99".

3


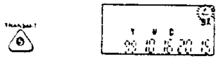
Set Month "10".

4


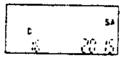
Set Date "16".

5


Set Time "20:15".
- When it is kept pressed, the indication changes in 30-minute steps.

6


Press TRANSMIT.
- The clocks on both the remote controller and VTR now start displaying the same time from 0 sec

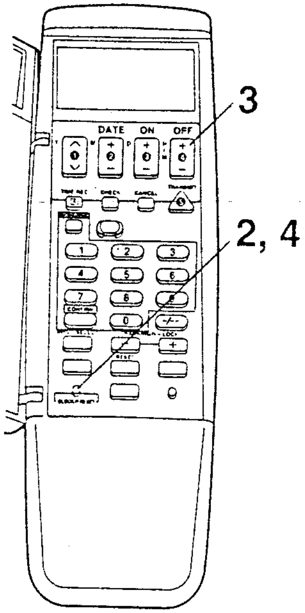
7


Close the door of the remote controller.

Note:
To change the previous clock setting, press CLOCK/PRESET for at least 2 seconds. The previous clock setting will be displayed then follow steps 2 to 7 above

Setting the Brand of your TV in the Remote Controller

This remote controller can be used to operate 5 brands of TV sets.



Brand No.	Manufacturer
1	Panasonic
2	
3	
4	
5	GRUNDIG/Blaupunkt
6	PHILIPS
7	SONY

Preparation
- Turn on the TV.
- Install the batteries in the remote controller. See page 11.

Operations **Display Symbols**

1 Open the door of the remote controller.

2 Keep **CLOCK/PRESET** pressed for more than 2 seconds and then press it twice.

CLOCK/PRESET

- "TV" now appears on the remote controller's display.

3 Press **OFF** several times.

- When the brand number matches the make of your TV, the TV's power is turned off.

4 Press **CLOCK/PRESET**.

CLOCK/PRESET
D ON OFF

5 Close the door of the remote controller.

How to change the brand number
Each time the "+" side of OFF is pressed, the number is counted up by one as follows:

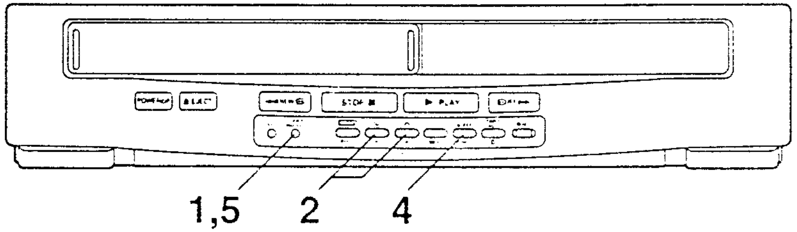
1→2→3...7

When the "−" side is pressed, the number is counted down by one in the reverse order to that indicated above.

Notes:
- Some TV models cannot be operated using this remote controller.
- With some models, it may only be possible to turn the TV off using this control.

When the brand number is 1, 2, 3 or 4:
When the TV's power is turned off in step 3 above, turn it back on and adjust the TV's volume. The volume can be adjusted if the brand number matches the make of TV.
If it is not possible to adjust the TV's volume, try setting the brand number (1 to 4) to match the make of TV again until the volume can be adjusted.

Storing TV Broadcasts into your VTR

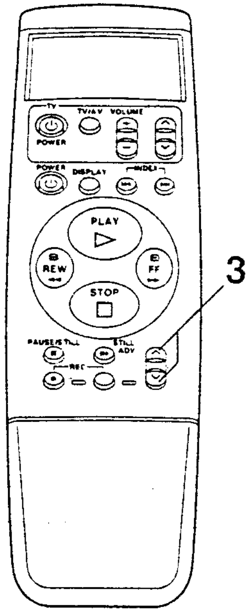


Introduction

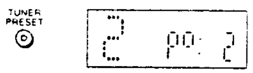
The VTR is fitted with its own tuner (just like a normal TV set) and can be pre-set to receive up to 42 TV broadcast stations.

Preparation

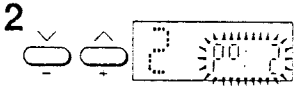
- Confirm that the TV is on and the VTR viewing channel is selected
- Turn on the VTR and select the programme position except A1.
- Install the batteries in the remote controller. See page 11.



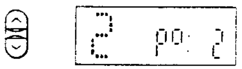
Operations **Display Symbols**

1


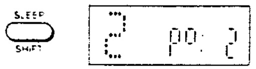
Keep **TUNER PRESET** pressed for more than 2 seconds.

2


Search for the TV Station.
- If the required station is not displayed, press + or − again.

3


Select programme position.

4


Store the broadcast station.
- To store the other stations, repeat steps **2** to **4**.

5

TUNER PRESET

Press **TUNER PRESET**.

Note:
- While tuning, your video may lock onto several weak stations from distant transmitters. Should this occur press + or − again until a strong station is received

Channel Plan

You should set the Programme Positions on the VTR to match the remote controller setting so when using the Video Plus+ programming the correct broadcast station is recorded.
The table below shows the correct setting.

Programme position	TV station
1	BBC1
2	BBC2
3	ITV
4	Channel 4
A1, 5~20	*Satellite input

*Satellite input
To receive satellite stations, the satellite receiver must be connected to the VTR and programme position must be set depending on the type of the connection made.

A1:	When the satellite receiver is connected to the AV1 socket.
5~20:	When the satellite receiver is connected by means of the RF coaxial cable. Follow the tuning procedure on page 16.
•A2:	No function.

Tuning Procedure on the VTR

Stations can be tuned in by following the steps given below.

1 Keep **TUNER PRESET** pressed for more than 2 seconds.

2 Search for the TV station by pressing + or −, and then press **NEXT**.

3 Select programme position by using + or −.

4 Press **SHIFT** to memorize the broadcast station.
- To memorize the other stations, press **NEXT** and then repeat steps 2 to 4.

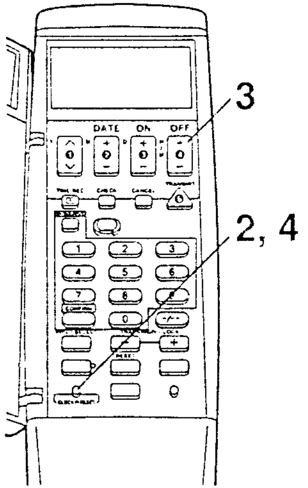
5 Press **TUNER PRESET**.

Setting the Satellite Position on the Remote Controller

The remote controller must be set to the selected programme position for the satellite receiver, in order to record satellite stations using Video Plus+ programming.

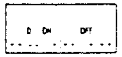
Note:
A satellite receiver cannot be operated using this unit's remote controller.

Preparation
Set the clock of the remote controller first. See page 14.



Operations **Display Symbols**

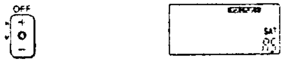
1 Open the door of the remote controller.



2 Keep **CLOCK/PRESET** pressed for 2 seconds or more and then press it again.

CLOCK/PRESET

3 Select A1 or 5~20.

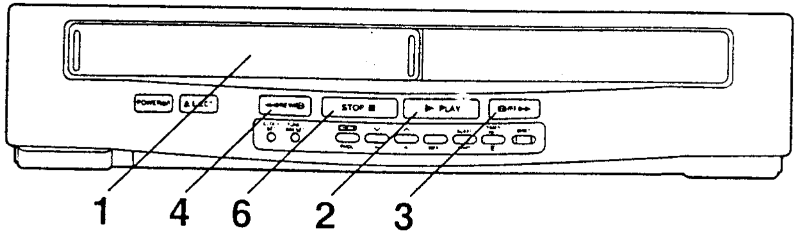


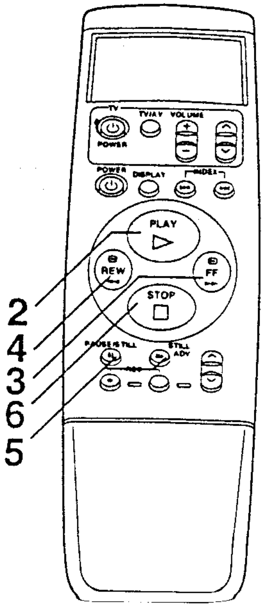
4 Press **CLOCK/PRESET**.

CLOCK/PRESET

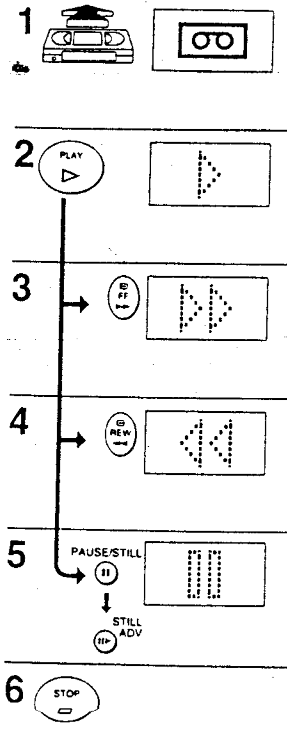
5 Close the door of the remote controller.

Playback

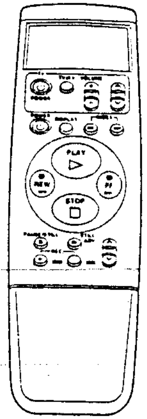




Operations — **Display Symbols**



1. Insert a recorded cassette tape.
2. Start viewing the picture.
3. Search forward by tapping FF.
   - To change back to normal playback, press PLAY.
4. Search backward by tapping REW.
   - To change back to normal playback, press PLAY.
5. View a still picture.
   - To advance one frame of the still picture, press STILL ADV.
   - To continue the normal playback, press PLAY or PAUSE/STILL.
6. Stop viewing the picture.



Other Playback Functions

To obtain high speed picture during fast forward or rewind

Keep FF pressed during fast forward.
Keep REW pressed during rewind.

- The same operation can also be performed by turning the Shuttle Ring.

To find the beginning of each recording

Recording Index Signals

Index signals are recorded in following cases.
WRITE indicator appears on the Display.
- When a recording is started by pressing REC.
- When REC is pressed during recording.
- When timer recording is activated.

For example:

Searching for the 2nd recorded segment in the forward direction.
Press INDEX ►►| twice during playback or stop mode.

- After finding the specific recorded segment, playback starts automatically.
- For the reverse direction, press INDEX |◄◄.
- Up to 20 programmes can be searched for in both directions.
- The figure on the display is decremented by 1 each time an index signal is located. Bear in mind that the display will be decremented in this way even while either INDEX button is being pressed.

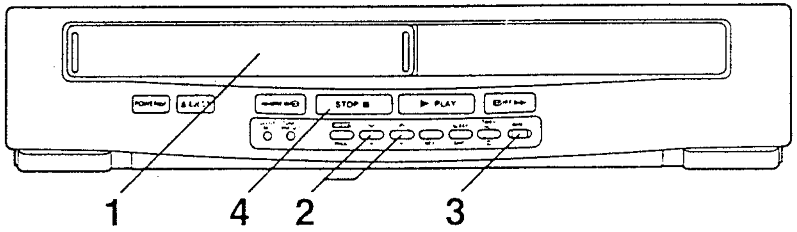
Notes:
- Cue, review or slow playback will be automatically released after 10 minutes, and still playback after 5 minutes.
- STILL ADV is active after pressing PAUSE/STILL of the Remote Controller.
- The INDEX search function can only work correctly, if the index signals are spaced at least 3 minutes apart.

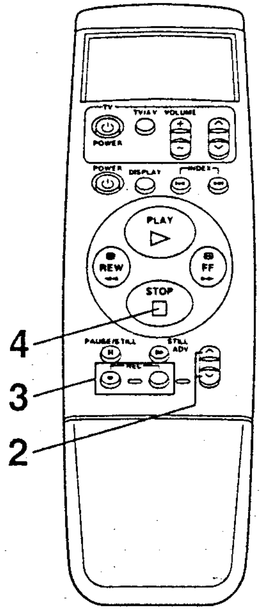
TRACKING/V-LOCK

For manual tracking adjustment
The + and − buttons are used to adjust the tracking when, for example, noise bars on the picture are better removed manually than by the automatic digital tracking control. After making a manual adjustment, press both buttons together to return to automatic digital tracking control.

For vertical locking adjustment
Use the + and − buttons to minimize any vertical jitter during still-picture playback.

Manual Recording

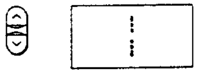




Operations **Display Symbols**

1

Insert a cassette tape.
- If it has already been inserted, press **OPERATE** to turn the VTR on.

2 

Select TV station.

3

Start recording.

4

Stop recording.

To interrupt Recording

Press PAUSE/STILL during recording.
Press again to continue recording.

PAUSE/STILL
REC

To record One TV Programme while Viewing Another Programme

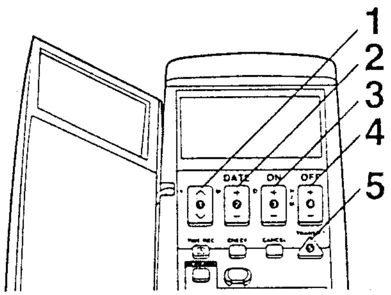
1 Refer to the on-the-spot recording operations steps 1 to 3.

2 Select the TV programme on your TV set you wish to view at the present time.

Notes:
- When a video cassette with a broken off tab is inserted, the "REC" indication will flash to indicate that recording is not possible.
- The recording pause mode will be automatically released after 5 minutes, and be back to the stop mode.

Timer Recording

Using the Remote Controller



For Example:

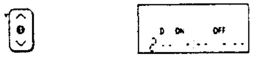
Programme position (channel);	2
Date;	27th, October
Starting time;	20:02
Ending time;	21:30

Preparation

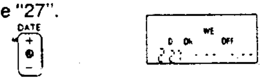
- Insert a cassette tape with an intact erasure prevention tab.
- Open the door of the remote controller.

Operations **Display Symbols**

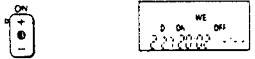
1 Set Programme position (channel) "2".



2 Set Date "27".

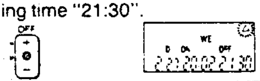


3 Set Starting time "20:02".



- When it is kept pressed, the indication changes in 30-minute steps.

4 Set Ending time "21:30".



5 Press **TRANSMIT**.

- The VTR will be in Timer recording standby mode.

6 Close the door of the remote controller.

Timer Recording from External Signal Source

If Timer Recording is performed by a unit connected to the AV1 socket, select the A1 indicator in step 1 for the programme position.

Checking a Timer Programme

- The VTR must be turned on, or the timer recording indicator "⏲" is lit.

Press **CHECK** repeatedly until the desired timer programme number is displayed.

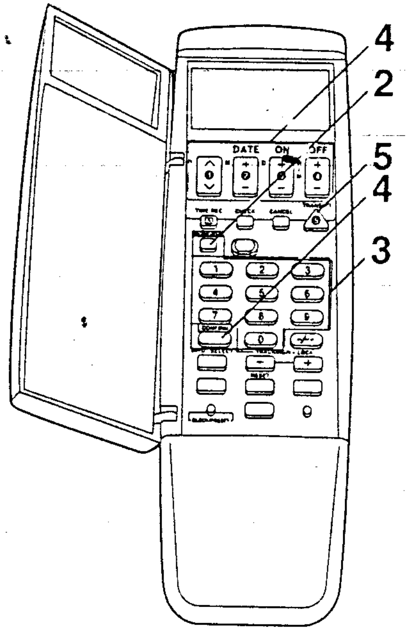
Cancelling a Timer Programme

1 Press **CHECK** repeatedly until the desired timer programme number is displayed.

2 Press **CANCEL**.

Programming the Video Plus+ PlusCode

Programming is now easier than ever: simply enter the PlusCode provided in the programme schedule column carried by newspapers and magazines.
PlusCodes are numbers which are assigned to each programme listed in the TV programme schedule carried in newspapers and TV guides. When these codes are entered and TRANSMIT is pressed, the codes are converted into the actual programming and sent to the VTR.



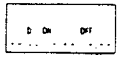
Note:
A satellite receiver cannot be operated using this unit's remote controller.

Preparation

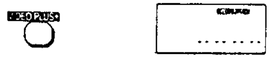
- Insert a cassette tape with an intact erasure prevention tab.
- Set the programme positions on both the VTR and remote controller as shown on page 17.

Operations **Display Symbols**

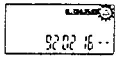
1 Open the door of the remote controller.



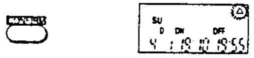
2 Press **VIDEO PLUS+**.



3 Enter a PlusCode.
Example: 920216



4 Press **CONFIRM** to check that the code corresponds to the right programme.



- To make any corrections, use buttons ❶–❹.
- To prolong End time, use button ❹.

5 Press **TRANSMIT**.

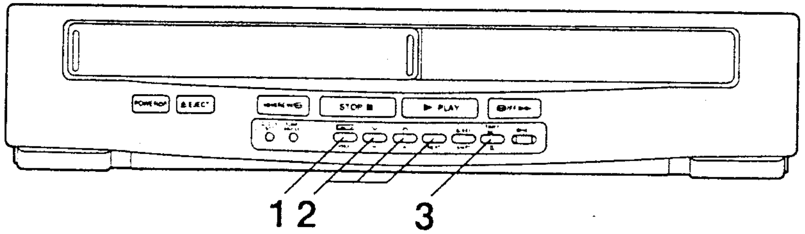
- The VTR will be in Timer recording standby mode.

6 Close the door of the remote controller.

Notes:

- When the PlusCode is used for programming, the recording time may be slightly longer than the actual programme time.
- Repeat steps 2 to 4 if "Err" appears on the remote controller.
- When programming two or more programmes, repeat steps 2 to 5 after pressing **TRANSMIT**.
- The procedures for checking and canceling whatever has been programmed are the same as for remote control programming.

Timer Recording



For Example:

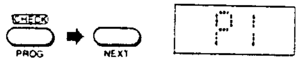
Timer programme number;	1
Programme position (channel);	2
Date;	27th, October
Starting time;	20:02
Ending time;	21:30

(present date; 16th October)

Preparation
Insert a cassette tape with an intact erasure prevention tab.

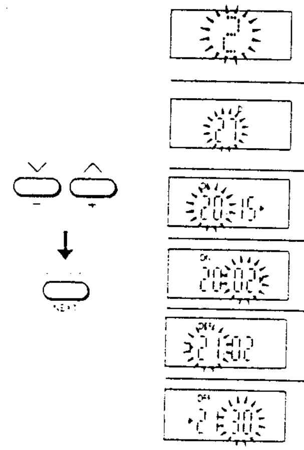
Operations **Display Symbols**

1



Select **Timer Programme number** "1", and then press **NEXT**.
P1 - - - - - - - -: When nothing is programmed
P1 : When something has already been programmed

2 Set each item by pressing + or − and **NEXT**.



Set **Programme position** (channel) "2".

Set **Date** "27".

Set **Starting time** (hour) "20".

Set **Starting time** (minute) "02".

Set **Ending time** (hour) "21".

Set **Ending time** (minute) "30".
- There is no need to press **NEXT**.

3

To activate timer recording, press **TIMER REC**.

Timer Recording from External Signal Source

If Timer Recording is performed by a unit connected to the AV1 socket, select the A1 indicator for the programme position.

Setting other Programmes in Succession

Repeat steps 1 and 2

Checking a Timer Programme

Select the timer programme number to be checked by pressing **CHECK/PROG**.

Cancelling a Timer Programme

1. Release from the standby mode by pressing **TIMER REC**.
2. Select the timer programme number to be canceled by pressing **CHECK/PROG**.
3. Press + and − simultaneously for more than 3 seconds.

Note:

If a timer recording is not performed to the end (due to insufficient tape or cancellation by the user), the programmed timer recording data will be cancelled from the memory by 4 a.m. two days later.
However, if the Timer Record Function is activated at that time, the programmed timer recording data will be cancelled at 4 a.m. the next day.

Optional Function

PDC (Programme Delivery Control)

The Programme Delivery Control (PDC) is a very convenient system which assures that the TV programmes you have programmed for timer recording will be recorded exactly from beginning to end, even if the actual broadcasting time differs from the scheduled time due to delayed start or extension of the programme duration. Also, if a programme is interrupted and, for example, some special news are inserted, the recording will also be interrupted automatically and resumed when the programme continues.

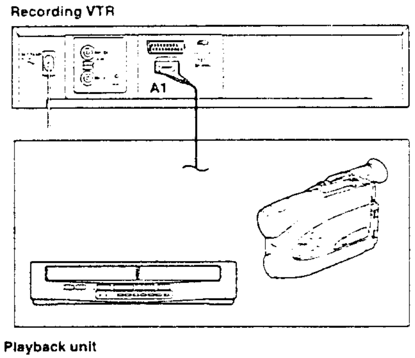
- This model is not equipped with PDC function. The PDC function becomes operative when the VTR is equipped with the optional PDC decoder. Consult your authorized video dealer.
- If the VTR is equipped with the PDC decoder, the PDC indicator lights when the correct PDC signals are transmitted from the broadcasting station.
- When the unit is set for programmed recording, the PDC indicator lights whether or not PDC signals are transmitted. This indicates that the recording has been programmed with PDC. To programme a recording without PDC, press **SLEEP (SHIFT)** in step 2: this cancels the PDC function and turns off the PDC indicator. If not cancelled, timer programmed start time will be delayed by up to 1 minute.
- In the case of PDC recording, use the correct time (PDC time) for recording the TV programmes. PDC recording is not performed when the time (PDC time) is incorrect, even if only by one minute, i.e. start time as published TV programme guide in newspaper, magazine, teletext, etc.
- Since PDC signals are received when a recording is programmed using PDC, the power of the unit's tuner section is turned on and the programmed broadcasting is received. When a multiple number of programmes have been programmed for timer recording, all of the broadcasts concerned will be received in sequence.
  These broadcast pictures can be seen on the video playback channel and AV out (no sound).
- If the actual broadcasting times of timer recordings overlap (regardless of whether they are PDC-controlled), the recording that starts first has always priority, and the recording of the later beginning programme will start only after the first timer recording has finished.
- When the PDC signal drops out because the broadcast signal is weak, or when a broadcasting station does not transmit a regular PDC signal, the timer recording will be performed in the normal mode (without PDC) even if it was programmed for PDC.
  In this case, even if the timer recording is performed, whatever has been programmed will not be cancelled at that particular time but at 4 a.m. on the following day.
- When programmes aired by different TV stations are programmed by PDC at a time when one programme ends as another starts, the first minute at the start of the second programme will not be recorded.

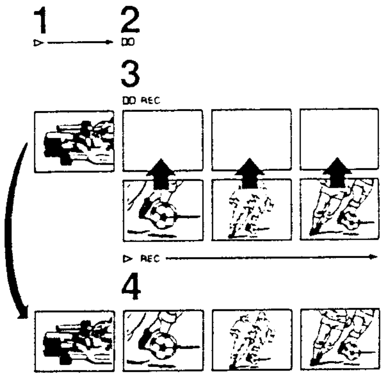
Editing

Assembly Editing

This function can be used to make up an edited tape from other recordings or video sources.

A new scene can be added to the end of a previous one.





Preparation

- Connect a movie camera or another VTR to this VTR as shown.
- Insert a recorded cassette tape with an intact erasure prevention tab.
- Select the video source required by pressing INPUT SELECT to set A1.

Operations

1. Search for the end of the previous recording.

   PLAY ▷

2. Press **PAUSE/STILL** at the end point.

   PAUSE/STILL

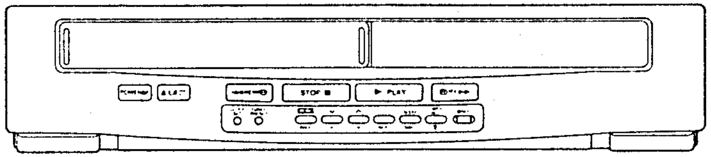
3. Set for the new recording by pressing **REC**.

   REC

4. Start the new recording by pressing **PAUSE/STILL** again.

   PAUSE/STILL

Other Functions



Automatic VTR Functions

Automatic Playback
When a cassette without an erasure prevention tab is inserted, the VTR starts playback automatically.

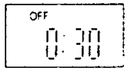
VTR-off Playback
When the VTR is off, an inserted cassette can be played back by pressing **PLAY**.

Automatic Rewinding
When the tape reaches its end during recording (except for timer recording) or playback, it will automatically be rewound to the beginning.

Automatic Switching Off and Ejection
When the VTR is switched off, an inserted cassette can be ejected simply by pressing **EJECT**. The VTR will eject the cassette and automatically turn itself off again.

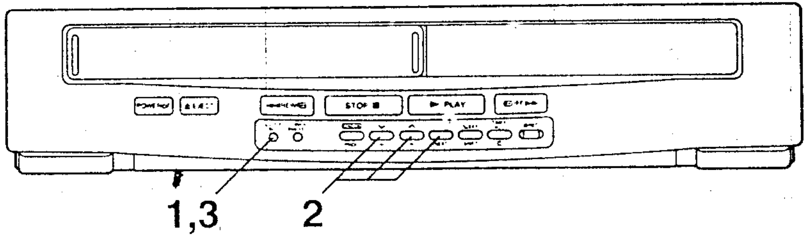
Automatic VTR Off Time Setting
Press **SLEEP** for the desired time.

SLEEP
SHIFT



- Each press gives a 30 minutes time span up to 9 hours.
- To cancel the setting time, press **SLEEP** repeatedly to set 0.00.

Setting the Clock of the VTR



In addition to setting the VTR clock from the remote controller, it can also be set directly from the VTR.

Preparation
Turn on the VTR.

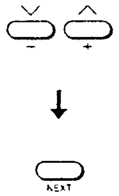
For Example:
Date; 16th, October, 1999
Time; 20:15

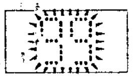
Operations **Displa, Symbols**

1

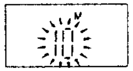
Keep **CLOCK SET** pressed for more than 2 seconds.

2 Set each item by pressing + or – and NEXT.

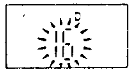




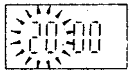
Set **Year** "99".



Set **Month** "10".



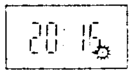
Set **Date** "16".



Set **Hour** "20".

Set **Minute** "15".
- There is no need to press **NEXT**.

3



Press **CLOCK SET**.
- The clock will start.

Time Reset Function
If the clock is less than two minutes slow or fast, it can easily be reset to the proper time.
For example: Resetting the clock to 12.00 00.
1 Keep **CLOCK SET** pressed at any time between 11:58.00 and 12 01 59 for more than 2 seconds.
2 Press **CLOCK SET** again as soon as you hear the 12:00.00 time signal.

Note:
The clock operates for at least 60 minutes by its backup system in the event of power failure

SECTION 2

ADJUSTMENT PROCEDURES

2-1. DISASSEMBLY METHOD

2-1-1. DISASSEMBLY FLOW CHART

This flow chart indicates disassembly steps of the cabinet parts and the circuit boards in order to gain access to part for servicing. When reassembling, perform the steps in the reverse order.

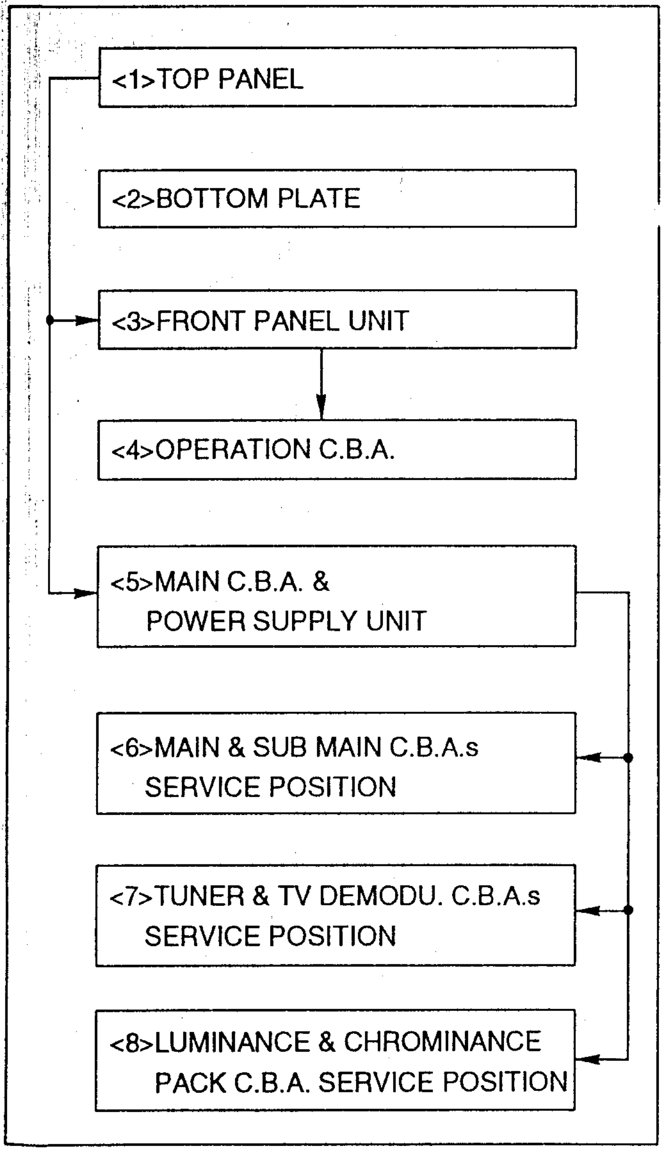

<1>TOP PANEL
<2>BOTTOM PLATE
<3>FRONT PANEL UNIT
<4>OPERATION C.B.A.
<5>MAIN C.B.A. & POWER SUPPLY UNIT
<6>MAIN & SUB MAIN C.B.A.s SERVICE POSITION
<7>TUNER & TV DEMODU. C.B.A.s SERVICE POSITION
<8>LUMINANCE & CHROMINANCE PACK C.B.A. SERVICE POSITION

Fig. D1

<1> REMOVAL OF THE TOP PANEL

Remove .... 4 Screws (A)

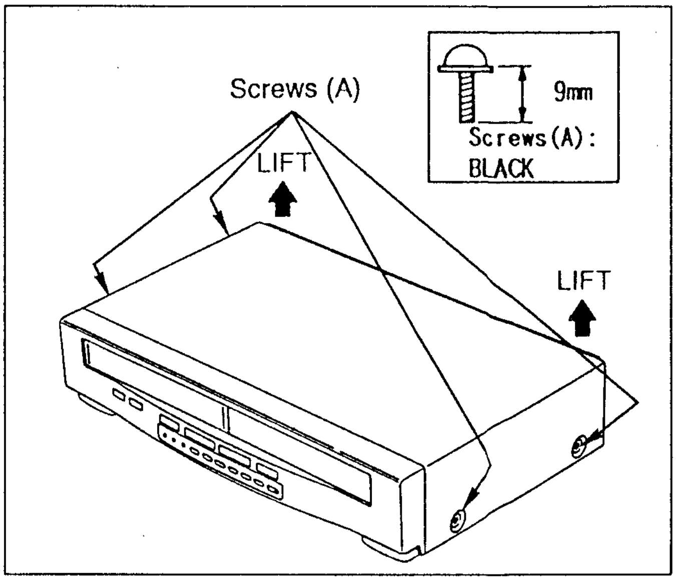

Screws (A)
LIFT
LIFT
9mm
Screws (A) : BLACK

Fig. D2

<2> REMOVAL OF THE BOTTOM PLATE

Remove .... 2 Screws (B)
Unlock .... 6 Tabs (C)

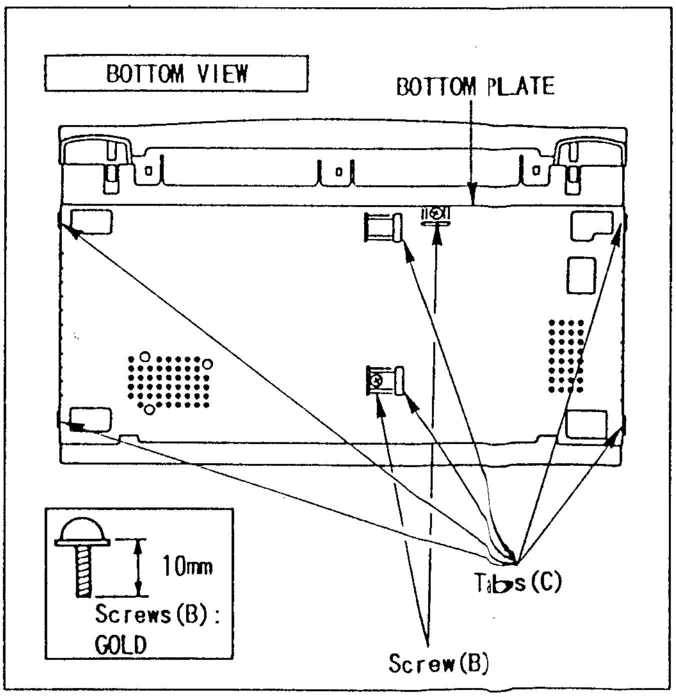

BOTTOM VIEW
BOTTOM PLATE
10mm
Screws (B) : GOLD
Tabs (C)
Screw (B)

Fig. D3

<3> REMOVAL OF THE FRONT PANEL UNIT

Remove......... Screw (D)
Unlock .... 8 Tabs (E)

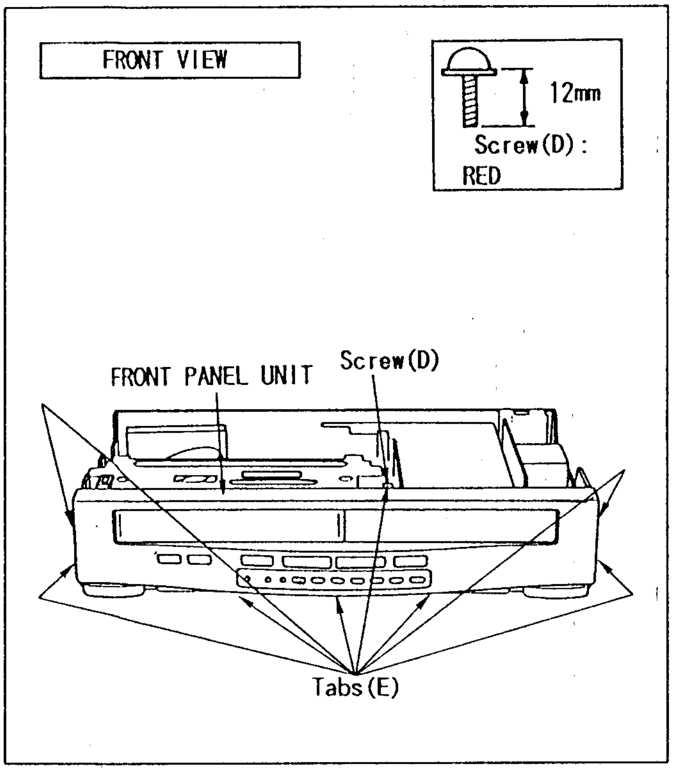

FRONT VIEW
12mm
Screw(D) :
RED
FRONT PANEL UNIT
Screw(D)
Tabs(E)

Fig. D4

<4> REMOVAL OF THE OPERATION C.B.A.

Unlock .... 4 Tabs (F)

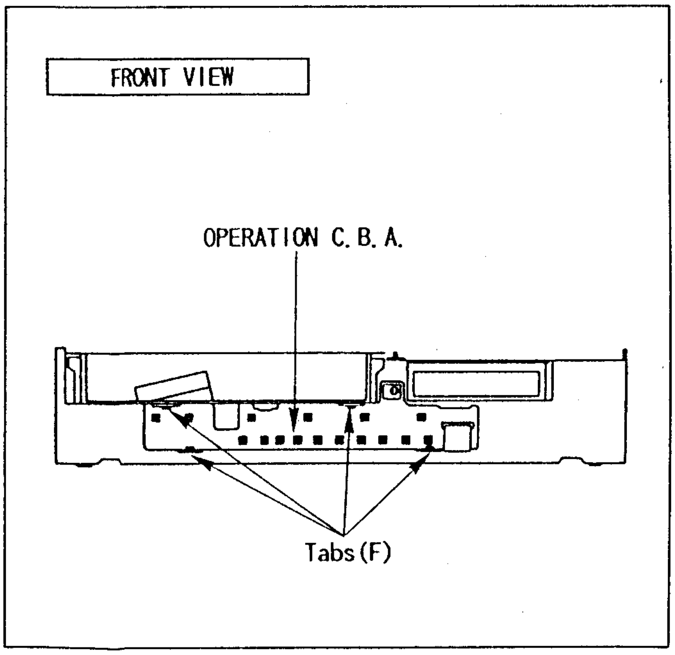

FRONT VIEW
OPERATION C. B. A.
Tabs(F)

Fig. D5

<5> REMOVAL OF THE MAIN C.B.A. & THE POWER SUPPLY UNIT

1) REMOVAL OF THE MAIN C.B.A.

Remove .... 3 Screws (G)
Unlock........... 5 Tabs (H)

2) REMOVAL OF THE POWER SUPPLY UNIT

Remove .... 2 Screws (I)
Unlock........... 2 Tabs (J), (K)

<Removal Procedure>

1) Unlock the tab (J) and slightly lift up the hook (L) to release from the frame.
   (Refer to Fig. D6-1)

2) Unlock the tab (K) and slide the hook (M) to the front side, to release from the frame.
   (Refer to Fig. D6-2)

3) Take out the Power Supply unit from the frame.

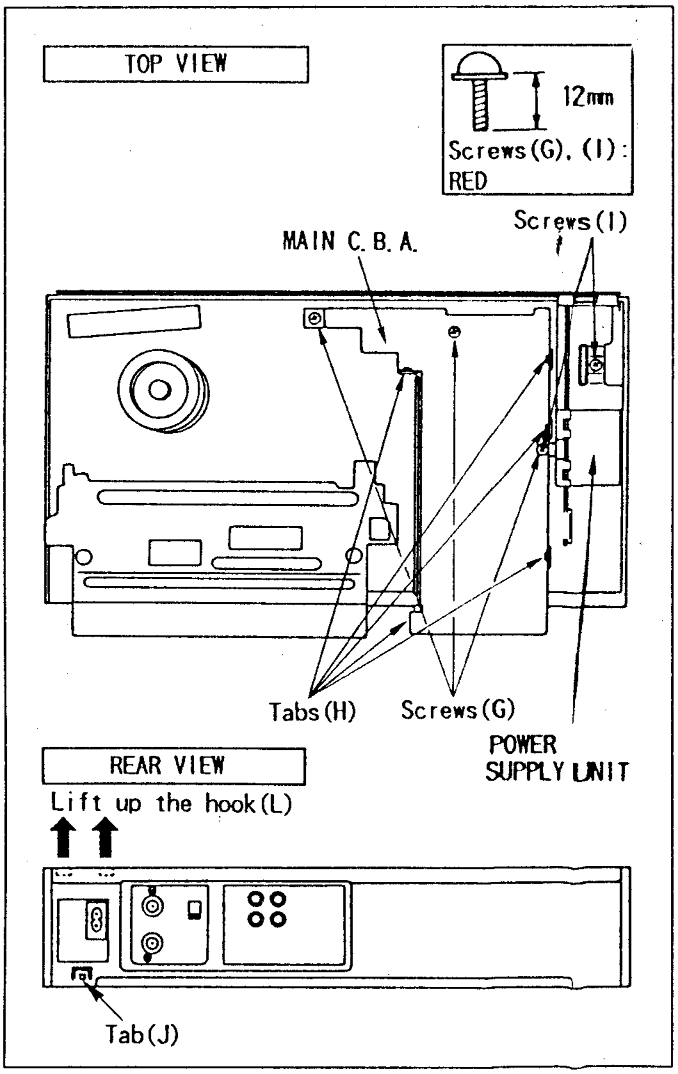

TOP VIEW
12mm
Screws(G), (I) :
RED
MAIN C. B. A.
Screws(I)
Tabs(H)
Screws(G)
POWER SUPPLY UNIT
REAR VIEW
Lift up the hook(L)
Tab(J)

Fig. D6-1

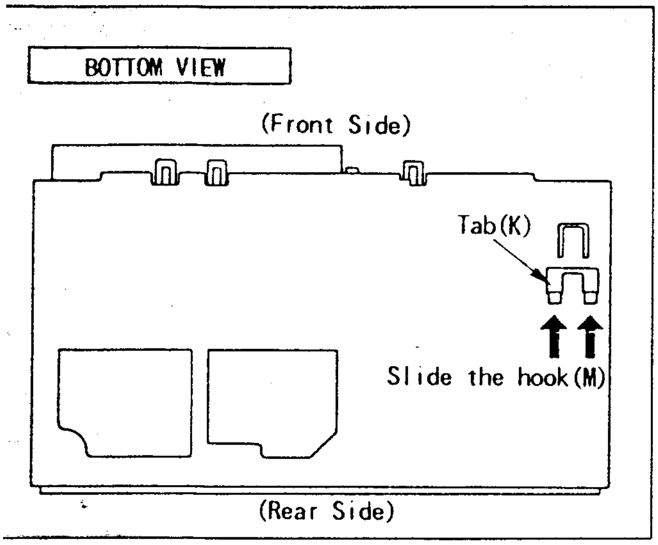

BOTTOM VIEW
(Front Side)
Tab(K)
Slide the hook(M)
(Rear Side)

Fig. D6-2

> MAIN & SUB MAIN C.B.A.s SERVICE POSITION

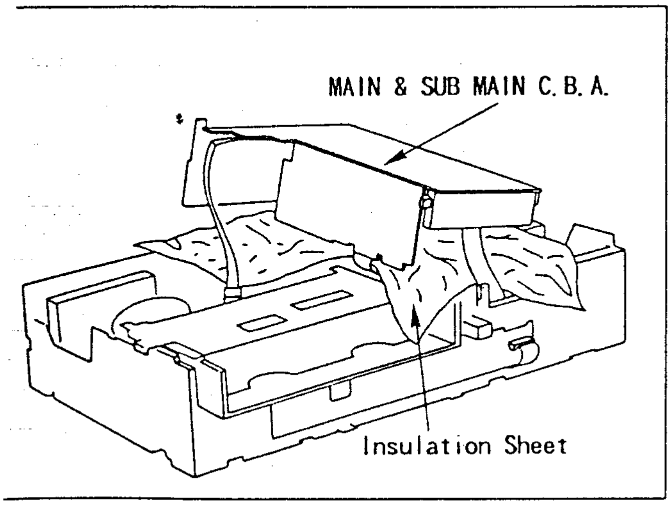

MAIN & SUB MAIN C.B.A.
Insulation Sheet

Fig. D7

<7> TUNER ,TV DEMODU. & VPS PACK C.B.A.s SERVICE POSITION

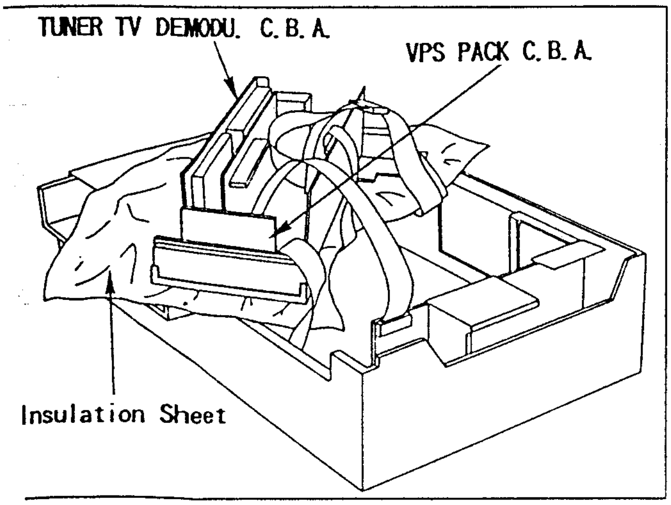

TUNER TV DEMODU. C.B.A.
VPS PACK C.B.A.
Insulation Sheet

Fig. D8

<8> LUMINANCE & CHROMINANCE PACK SERVICE POSITION

<Preparation>

1) Position the Luminance & Chrominance Pack C.B.A. With the Main C.B.A. after removing the Input / Output Jack and Tuner & TV Demodu. C.B.A..
2) Supply the video signal through the AV Terminal to check the Luminance & Chrominance Pack C.B.A..

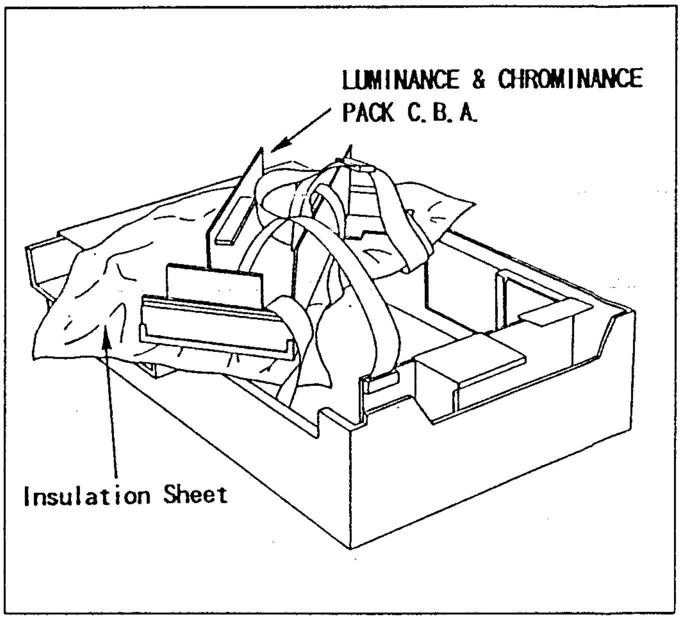

LUMINANCE & CHROMINANCE PACK C.B.A.
Insulation Sheet

Fig. D9

2-2. MECHANICAL ADJUSTMENT PROCEDURES

Refer to the K-Mechanism Service Manual (Order No. :VRD9307M131).

CAUTIONS:

To turn on the Adjustment Mode for Tape Interchangeability, connect a Cut Jumper Wire as shown in Fig. D9.
(Auto Tracking is turned off.)
After finishing the adjustment, disconnect the Cut Jumper Wire.

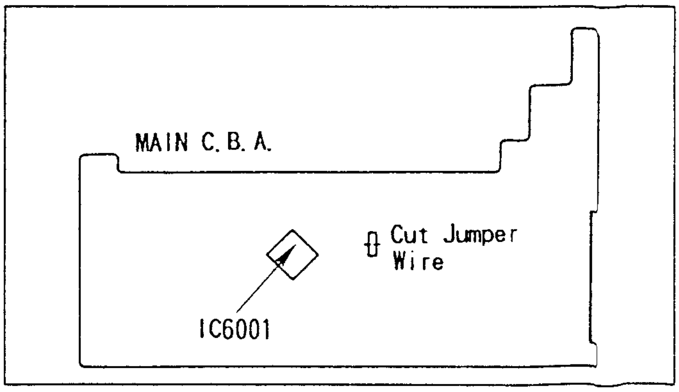
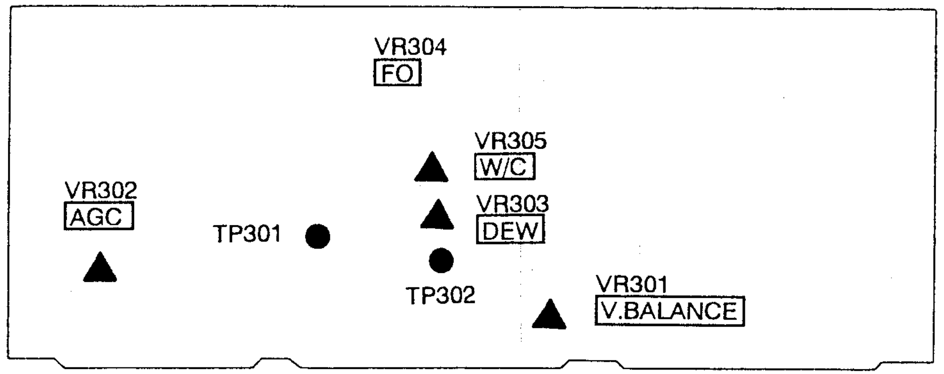
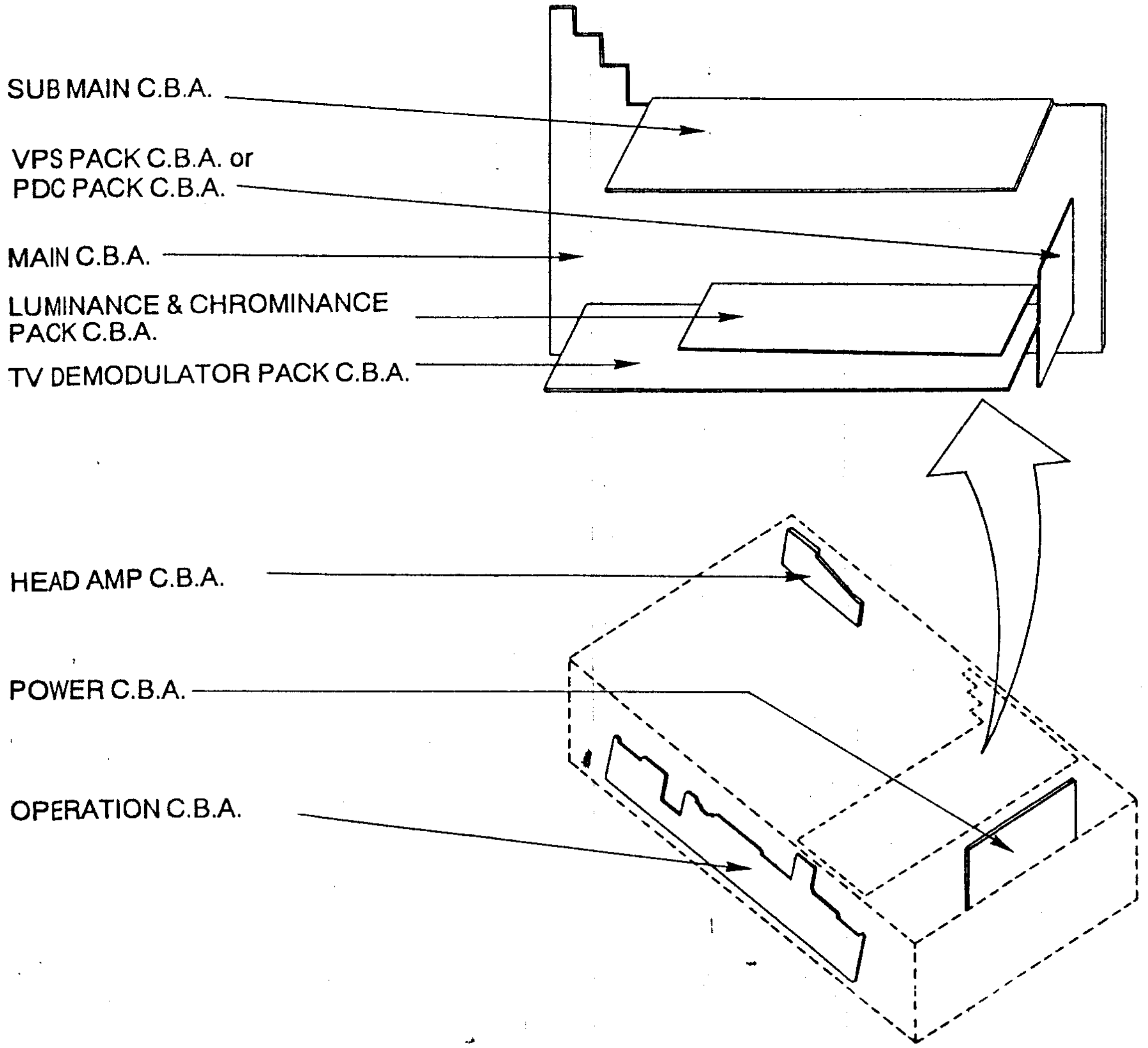

MAIN C.B.A.
Cut Jumper Wire
IC6001

Fig. D10

LUMINANCE & CHROMINANCE PACK C.B.A.


VR304
FO
VR305
W/C
VR303
DEW
VR302
AGC
TP301
TP302
VR301
V.BALANCE

CIRCUIT BOARD LAYOUT


SUB MAIN C.B.A.
VPS PACK C.B.A. or
PDC PACK C.B.A.
MAIN C.B.A.
LUMINANCE & CHROMINANCE
PACK C.B.A.
TV DEMODULATOR PACK C.B.A.
HEAD AMP C.B.A.
POWER C.B.A.
OPERATION C.B.A.

2-3. ELECTRICAL ADJUSTMENT PROCEDURES

This section provides complete adjustment procedures required for electric circuits of VHS Video Cassette Recorders.

2-3-1. TEST EQUIPMENT

1) Dual-trace Oscilloscope.
   (More than 35 MHz)
   Voltage Range :0.005-5v/div
   Frequency Range :DC-35MHz
   Probes :10:1, Probe Length :1.5m or less
2) Frequency Counter.
   Frequency Range :0-10MHz
   Probes : 1:1
3) Universal Counter.
4) Vacuum Tube Volt Meter. (V.T.V.M.)
5) Video Sweep Generator.
6) Sine Wave Generator.
7) Video pattern Generator.
8) VHS Alignment Tape. (VHJ8125H3F)
9) VHS Blank Tape.
10) Monitor.
11) Plastic Tip Driver.
12) DC Power Supply.

2-3-2. HOW TO READ ADJUSTMENT PROCEDURES

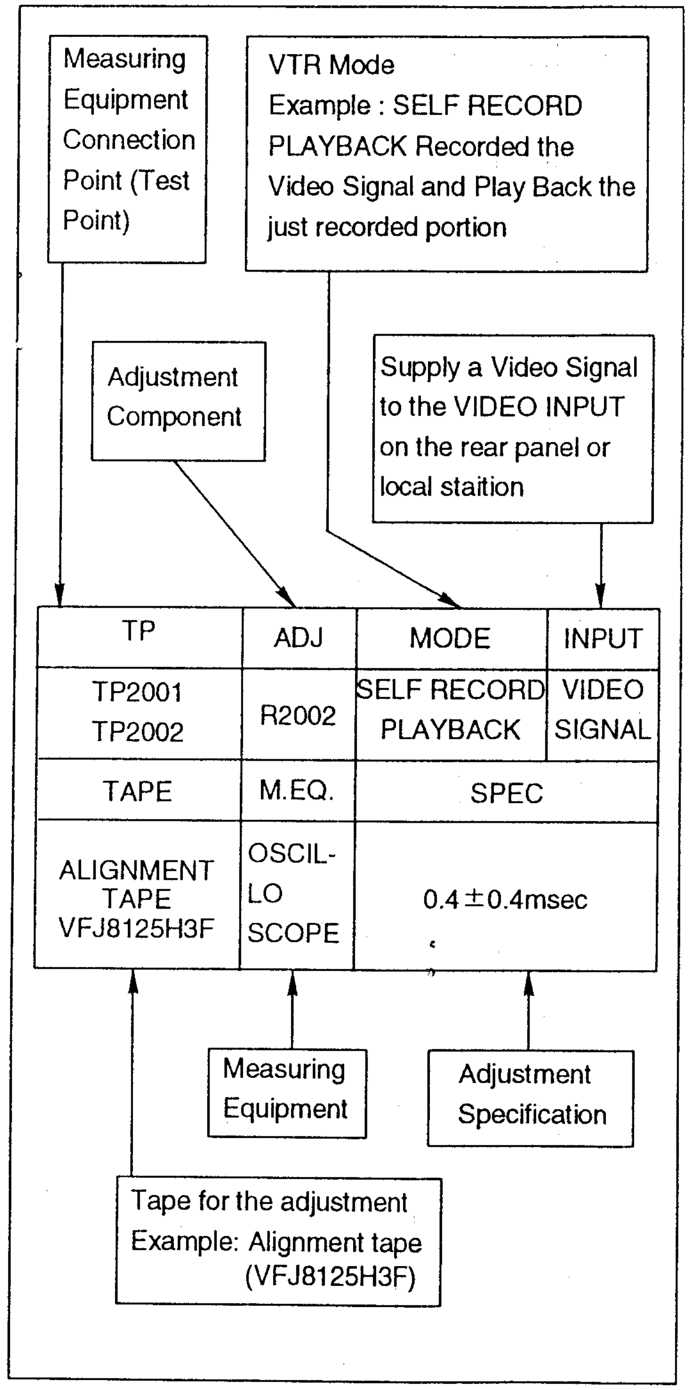

Measuring Equipment Connection Point (Test Point)
VTR Mode
Example : SELF RECORD PLAYBACK Recorded the Video Signal and Play Back the just recorded portion
Adjustment Component
Supply a Video Signal to the VIDEO INPUT on the rear panel or local staition
TP
ADJ
MODE
INPUT
TP2001
TP2002
R2002
SELF RECORD
PLAYBACK
VIDEO
SIGNAL
TAPE
M.EQ.
SPEC
ALIGNMENT
TAPE
VFJ8125H3F
OSCIL-
LO
SCOPE
0.4±0.4msec
Measuring Equipment
Adjustment Specification
Tape for the adjustment
Example: Alignment tape
(VFJ8125H3F)

Fig. E1

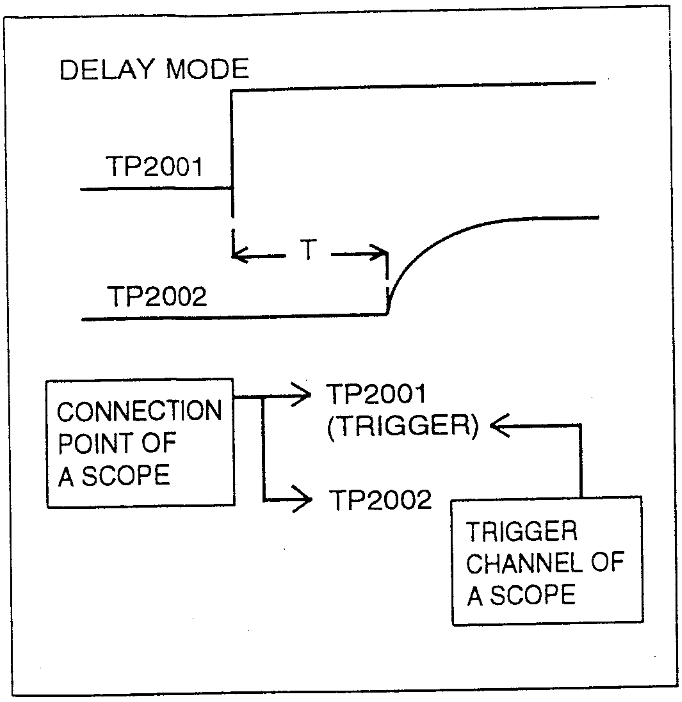

DELAY MODE
TP2001
T
TP2002
CONNECTION POINT OF A SCOPE
TP2001 (TRIGGER)
TP2002
TRIGGER CHANNEL OF A SCOPE

Fig. E2

SERVO SECTION

2-3-3. PG SHIFTER ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP2001 VIDEO OUT	VR2001	PLAYBACK	☒
TAPE	M. EQ.	SPEC.	
ALIGNMENT TAPE VFJ8125H3F	OSCILLO-SCOPE	6.5±0.5(H)	

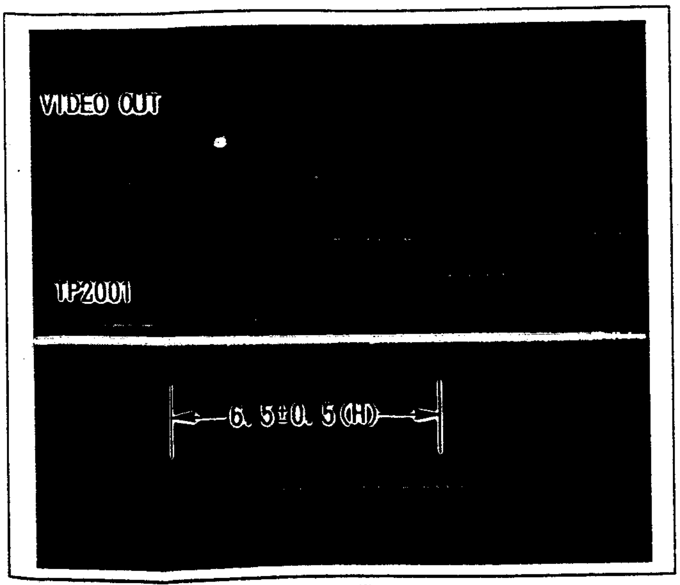


Fig. E3

VIDEO SECTION

2-3-4. AGC ADJUSTMENT

TP	ADJ.	MODE	INPUT
VIDEO OUT	VR302	STOP	COLOUR BAR
TAPE	M. EQ.	SPEC.	
☒	OSCILLO-SCOPE	2.0±0.06(Vp-p)	

1. Supply the colour bar signal to video input.
2. Conect the oscilloscope to video output.
3. Adjust VR302 so that the video output signal level is 2.0±0.06Vp-p (Unterminated).

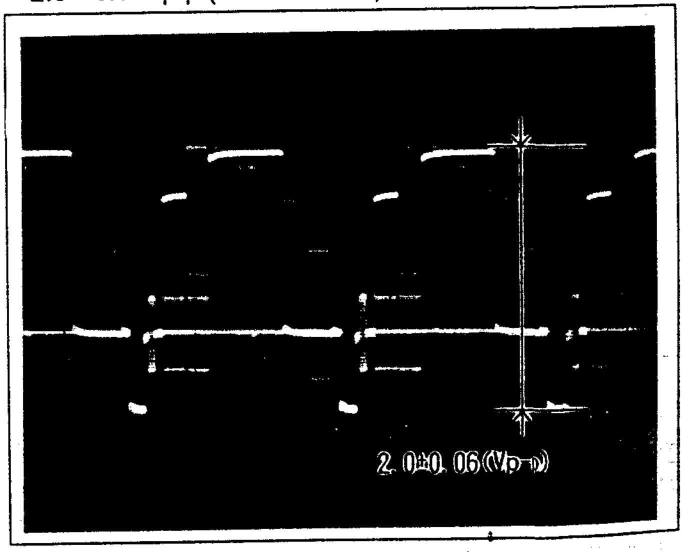


Fig. E4

2-3-5. WHITE CLIP ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP302	VR305	RECOR-DING	COLOUR BAR
TAPE	M.EQ.	SPEC.	
☒	OSCILLO-SCOPE	WHITE CLIP LEVEL $190\pm{}^{5}_{3}$ %.	

Note: Remove the INPUT/OUTPUT Jack and Tuner & TV Demodu. C.B.A.

1. Supply the colour bar signal to video input.
2. Connect the oscilloscope to TP302.
3. Record the colour bar signal.
4. Adjust VR305 so that the white clip level is $190\pm{}^{5}_{3}$ %.

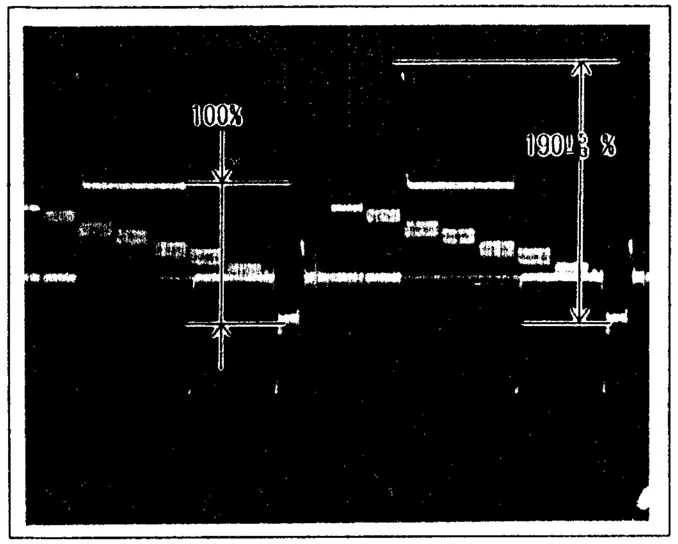


Fig.E5

2-3-6. DEVIATION ADJUSTMENT

TP	ADJ.	MODE	INPUT
VIDEO OUT	VR303 VR304	SELF RECORD PLAYBACK	COLOUR BAR
TAPE	M.EQ.	SPEC.	
BLANK TAPE	OSCILLO-SCOPE	Y:2.0±0.1(Vp-p)	

1. Supply the colour bar signal to video input.
2. Connect the oscilloscope to video output.
3. Record the colour bar signal and adjust VR303 and VR304 during recording.
4. Playback the just recorded portion and confirm the playback Y-signal level is 2.0±0.1Vp-p(Unterminated). If the signal level is out of the specification, repeat 3. and 4. until the signal level becomes the specification.

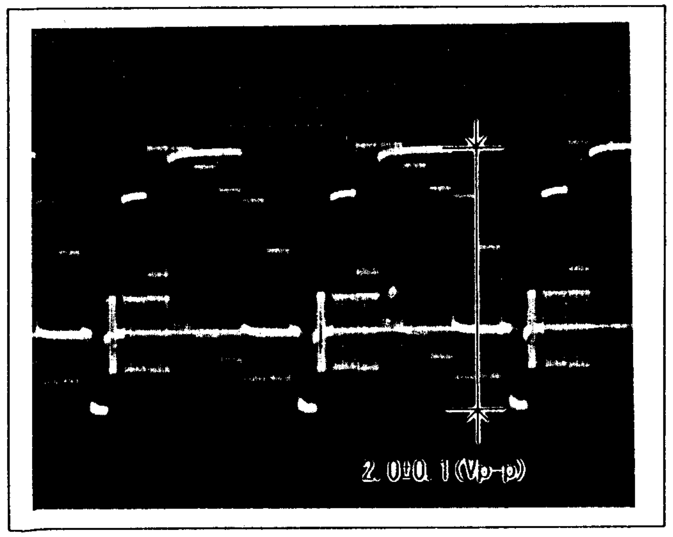


Fig. E6

2-3-7. Y-NR BALANCE ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP301	VR301	STOP	COLOUR BAR
TAPE	M. EQ.	SPEC.	
	OSCILLO-SCOPE	MINIMIZED AS POSSIBLE	

Note: Remove the INPUT/OUTPUT Jack and Tuner & TV Demodu. C.B.A..

1. Supply the colour bar signal to video input.
2. Connect the oscilloscope to TP301.
3. Adjust VR301 so that the video signal level is minimized.

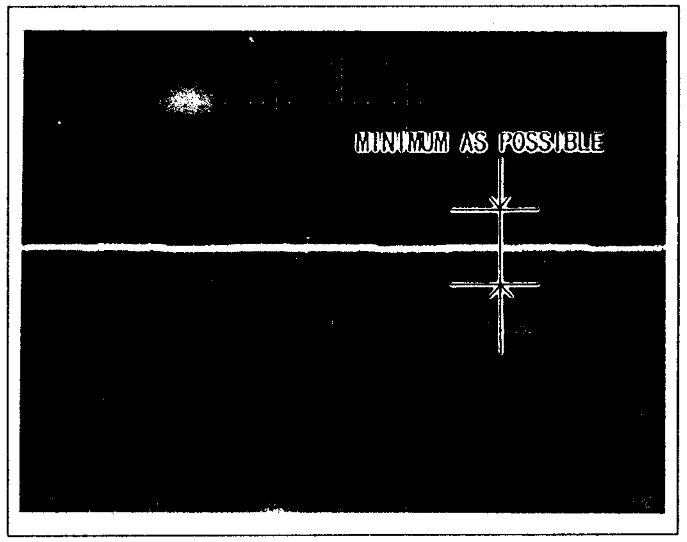


Fig. E7

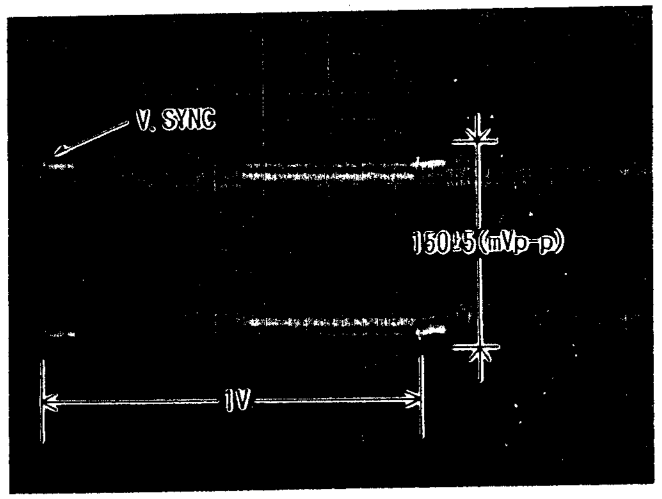
2-3-8. RECORDING CURRENT ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP507(HOT) TP508(GND)	VR501(Y) VR502(C)	RECORD-ING	COLOUR BAR
TAPE	M.EQ.	SPEC.	
BLANK TAPE	OSCILLO-SCOPE	Y:150±5(mVp-p) c:37±2(mVp-p)	

Note: Connect a jumper wire between Pin(6) of IC6001 and GND.

1. Record the colour bar signal.
2. Connect the oscilloscope to TP507(HOT) and TP508 (GND).
3. Adjust VR501 so the amplitude of V.Sync tip portion is 150±5mVp-p.
4. Supply +5V DC to PP3001-6 to reduce luminance component.
5. Adjust VR502 until the amplitude of Cyan is 37±2mVp-p.

(Y= Luminance)



(C= Chrominance)

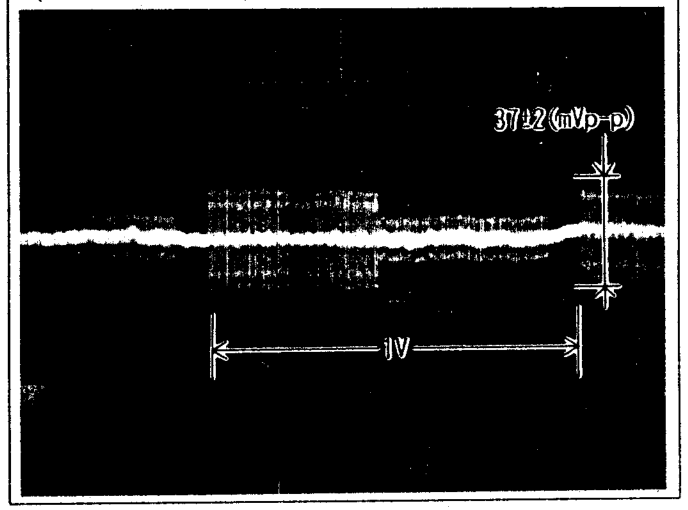


Fig. E8

2-3-9. VIDEO FREQUENCY RESPONSE ADJUSTMENT

TP	ADJ.	MODE	INPUT
VIDEO OUT	VR3012	SELF RECORD PLAYBACK	VIDEO SWEEP SIGNAL(Shown in Fig.E9)
TAPE	M.EQ.	SPEC.	
BLANK TAPE	OSCILLO-SCOPE, VIDEO SWEEP GENERATOR	0±1(dB) (90~100%)	

Note: Set the Video Sweep Signal as shown in Fig.E9.

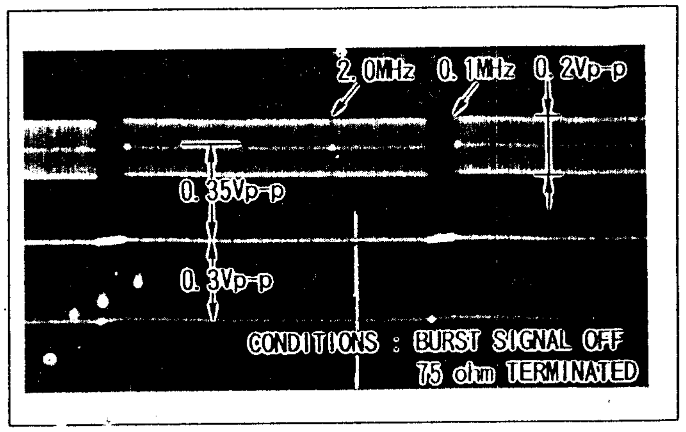


Fig. E9

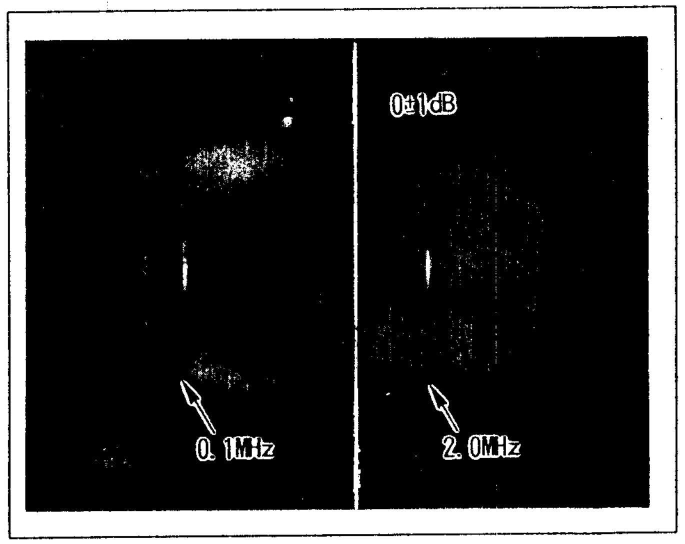


Fig. E10

TIMER SECTION

2-3-10. TIMER REFERENCE CLOCK ADJUSTMENT

TP	ADJ.	MODE	INPUT
TL7501	C7501	STOP	
TAPE	M.EQ.	SPEC	
	UNIVERSAL COUNTER	7812.5±0.015(usec)	

SECTION 3
SCHEMATIC DIAGRAMS

3-1. ABBREVIATIONS

443NT [L]	4.43 NTSC Ⓛ
A. COMP	AUDIO COMPONENT SIGNAL
A. COMPO	AUDIO COMPONENT SIGNAL
A. D.P [L]	AUDIO DUBBING PAUSE Ⓛ
A. D/L [L]	AUDIO DUBBING PAUSE Ⓛ
A. DEF [S]	AUDIO DEFEAT
A. DEF [S] [L]	AUDIO DEFEAT
A. DUB P [L]	AUDIO DUBBING PAUSE Ⓛ
A. DUB [H]	AUDIO DUBBING Ⓗ
A. ERASE	AUDIO ERASE
A. H. SW	AUDIO HEAD SWITCHING PULSE
A. HEAD [R]	AUDIO HEAD (REC)
A. HEAD [W]	AUDIO HEAD (PLAY)
A. IN [L]	AUDIO INPUT (L)
A. IN [R]	AUDIO INPUT (R)
A. MUT [H]	AUDIO MUTE Ⓗ
A. MUTE [H]	AUDIO MUTE Ⓗ
A. OUT [L]	AUDIO OUTPUT (L)
A. OUT [R]	AUDIO OUTPUT (R)
A. RF OUT	AUDIO RF SIGNAL OUTPUT
A/VS/S. DATA	AV SW/SERIAL DATA
AC ONLINE	AC ONLINE
AC. O/EE. H	AC ONLINE/EE Ⓗ
AFC S C	AFC S CURVE
AFC [S]	AFC S CURVE
AFC. DEF	AFC DEFEAT
ARFC OUT	AUDIO RF SIGNAL OUTPUT
ART. V	ARTIFICIAL VERTICAL SYNC SIGNAL
ART. V. MM	ARTIFICIAL VERTICAL SYNC SIGNAL MONO MULTI
ART. V/H/N	ARTIFICIAL VERTICAL SYNC SIGNAL Ⓗ/NORMAL
AT. V/H/N	ARTIFICIAL VERTICAL SYNC SIGNAL
ATSW/TEST/NOR/SE	TEST/NORMAL/SERVICE
AUDIO IN [L]	AUDIO INPUT (L)
AUDIO IN [R]	AUDIO INPUT (R)
AUDIO OUT [L]	AUDIO OUTPUT (L)
AUDIO OUT [R]	AUDIO OUTPUT (R)
AUDIO SELECT [H]	AUDIO SELECT Ⓗ
AUDIO. L	AUDIO (L)
AUDIO. R	AUDIO (R)
AV CNT	AV CONTROL
AV CTL	AV CONTROL
AV CTL/S. CLK	AV CONTROL/SERIAL CLOCK
AV. C.M.	AV CONTROL MODE
AVCNT/METER. R	AV CONTROL/LEVEL METER (R)
AVSW/METER. L	AV SW/LEVEL METER (L)
B MODE. H	B MODE Ⓗ
B.G.P	BURST GATE PULSE
BACKUP 5V	BACK UP 5V
BAND. U.E.	BAND U
BANDVL. D	BAND VL
BI/MI [L]	BILINGUAL/MIX Ⓛ
BIL	BILINGUAL
BIL [L]	BILINGUAL Ⓛ

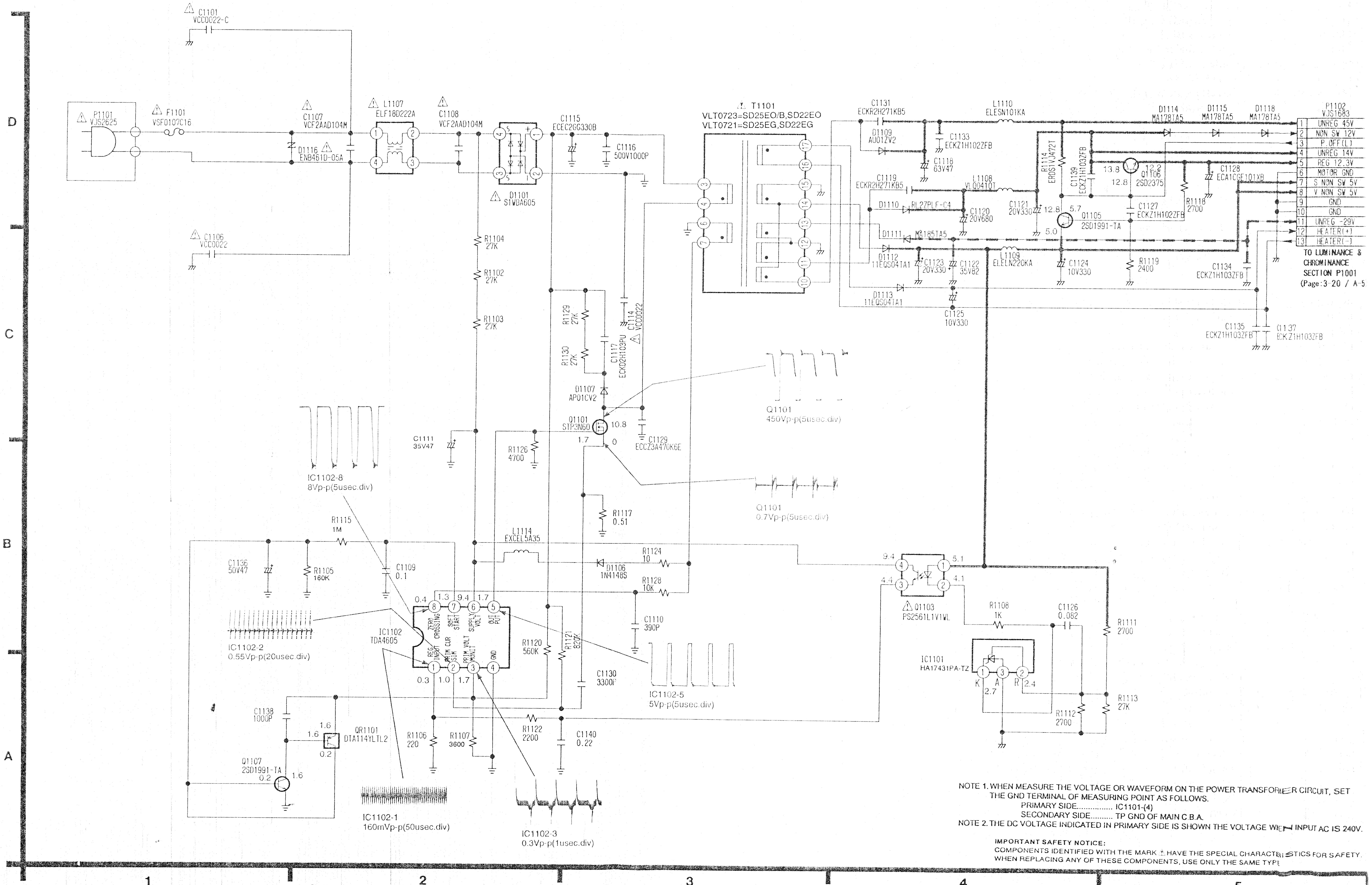
BIL. [H]	BILINGUAL Ⓗ
BIL/M1 [L]	BILINGUAL Ⓛ
BS CLOCK	BS CLOCK
BS DATA	BS DATA
BS LCH IN	BS L CHANNEL INPUT
BS MIX [H]	BS MIX Ⓗ
BS MON [H]	BS MONITOR Ⓗ
BS MONI [H]	BS MONITOR Ⓗ
BS RCH IN	BS R CHANNEL INPUT
BS VIDEO	BS VIDEO SIGNAL
BS VIDEO/BS1	BS VIDEO SIGNAL
BS [H]	BS Ⓗ
BS. LEVEL	BS LEVEL
BS. M [H]	BS MONITOR Ⓗ
BS/VTR [H]	BS/VTR Ⓗ
BUS CLK	BUS CLOCK
BUS LSN	BUS LISTEN
BUS TLK	BUS TALK
BUZZER	BUZZER
CAP EC	CAPSTAN TORQUE CONTROL
CAP M GND	CAPSTAN MOTOR GND
CAP. ET	CAPSTAN TORQUE CONTROL
CAP. FG1	CAPSTAN FG1 PULSE
CAP. FG2	CAPSTAN FG2 PULSE
CAS. SW	CASSETTE SW
CCN	PLAYBACK CONTROL SIGNAL (−)
CCP	PLAYBACK CONTROL SIGNAL (+)
CHM	CONTROL SIGNAL (+)
CHP	CONTROL SIGNAL (−)
CINEM [L]	CINEMA Ⓛ
CINEMA [L]	CINEMA Ⓛ
CINEMA/MIX	CINEMA/MIX
CKL	RATCH LOCK
CKS	SHIFT LOCK
CL	CLOCK
CLK	CLOCK
CLK (C.G)	CLOCK
CLOCK. IN	CLOCK INPUT
CLP	CLAMP
COL/B/W/NOR	COLOUR/BLACK & WHITE/NORMAL
COLOR [H]	COLOUR Ⓗ
CONV	CONVERTOR
CS	CHIP SELECT
CTL GND	CONTROL GND
CTL HEAD [+]	CONTROL HEAD (+)
CTL HEAD [−]	CONTROL HEAD (−)
CTL [+]	CONTROL HEAD (+)
CTL [−]	CONTROL HEAD (−)
CUE BIAS	CUE BIAS
CURRENT LIM	CURRENT LIMMITER
CYL ET	CYLINDER TORQUE CONTROL
CYL GND	CYLINDER GND
D.F.M. REC [H]	DELAIED FM RECORDING Ⓗ
D. FM REC [L]	DELAIED FM RECORDING Ⓛ
D. GND	DIGITAL GND

D. REC [H]	DELAYED RECORDING Ⓗ
D4/S. LED	D4/STILL LED
D4/STILLED	D4/STILL LED
DAC [CLK]	TUNER DAC (CLOCK)
DAC/FSCS	TUNER DAC/FS CHIP SELECT
DAREC [H]	DELAYED AUDIO RECORDING Ⓗ
DATA	DATA
DECODER [L]	DECODER (L)
DECODER [R]	DECODER (R)
DEW	DEW
DEW SNS	DEW SENSOR
DFMRE [H]	DELAYED FM AUDIO RECORDING Ⓗ
E. REC 5V	EXCEPT RECORDING 5V
EC	ERROR TORQUE CONTROL
ECR	ERROR TORQUE CONTROL REFERENCE VOLTAGE
EDT TRIG [L]	EDIT TRIGGER Ⓛ
EDIT [H]	EDIT Ⓗ
EE [H]	EE Ⓗ
EE [H]/INS [M]	EE Ⓗ/INSERT Ⓜ
EE. VV. TR	EE/VV/TRICK PLAY
EJECT. PO	EJECT POSITION
EJECT/VDET	EJECT/REVERSE SLOW LOCK
ENV. SEL	ENVELOPE SELECT
ENVE. OUT	ENVELOPE OUTPUT
ENVE. SEL	ENVELOPE SELECT
ENV SELECT	ENVELOPE SELECT
EP [H]	LP Ⓗ
EP/LP [H]	LP Ⓗ
EP/LP/SP	LP/SP
EP/SS [H]	LP/SLOW/STILL/STOP Ⓗ
EPROMCS	EPROM CHIP SELECT
EX. REC 5V	EXCEPT RECORDING 5V
FF/REW [L]	FIRST FORWARD/REWIND Ⓛ
FG1 IN	FG1 PULSE INPUT
FG2 IN	FG2 PULSE INPUT
FILTER ADJUSTMEN	FILTER ADJUSTMENT
FLY ERASE [H]	FLYING ERASE HEAD ON Ⓗ
FLY ON [H]	FLYING ERASE E HEAD ON Ⓗ
FLY. E [H]	FLYING ERASE HEAD ON Ⓗ
FM MUT [H]	FM AUDIO MUTE Ⓗ
FM MUTE [H]	FM AUDIO MUTE Ⓗ
FM OUT [L]	FM OUTPUT (L)
FM OUT [R]	FM OUTPUT (R)
FM PACK OUT [L]	FM PACK OUTPUT (L)
FM PACK OUT [R]	FM PACK OUTPUT (R)
FM/BS SEL [L]	FM/BS SELECT (L)
FM/BS SEL [R]	FM/BS SELECT (R)
FS. CLK	FS CLOCK
FUL. E [H]	FULL ERASE HEAD ON Ⓗ
FULL. E [H]	FULL ERASE HEAD ON Ⓗ
FULL. E. 12V	FULL ERASE 12V
GND [A]	GND (ANALOGUE)
GND [TU]	GND (TUNER)
GND/N. SW. 12V	GND/NON SW 12V
H. SYNC	HORIZONTAL SYNC
H. AMP. SW	HEAD AMP SW PULSE
H. P <R>	HEAD PHONE (R)
H. P <L>	HEAD PHONE (L)
H. P GND	HEAD PHONE GND
H. P OUT [L]	HEAD PHONE OUTPUT (L)
H. P OUT [R]	HEAD PHONE OUTPUT (R)
H. SW	HEAD SW PULSE
HEAD PHONE [L]	HEAD PHONE (L)
HEAD PHONE [R]	HEAD PHONE (R)
HEAD SW	HEAD SW
HEATER [+]	HEATER (+)
HEATER [−]	HEATER (−)
HSS	HORIZONTAL SYNC SIGNAL
HTR [+]	HEATER (+)
HTR [−]	HEATER (−)
I RFE	REFERENCE CURRENT
ICL	CONTROL AGC CIRCUIT
IF	INTERMEDIATE FREQUENCY
IN SELA1	INPUT SELECT A1 POSITION
IN SELA2	INPUT SELECT A2 POSITION
IN SELA3	INPUT SELECT A3 POSITION
INS L/R [L]	INSERT Lch/Rch Ⓛ
INS. [H]	INSERT Ⓗ
INSEL A1	INPUT SELECT A1 POSITION
INSEL A2	INPUT SELECT A2 POSITION
INSERT	INSERT
INSERT [H]	INSERT Ⓗ
IO CS	INPUT/OUTPUT CHIP SELECT
JOG1	JOG1
JOG S3 LED/FOWRD	JOG LED/FORWARD LED
JOG/F. LED	JOG LED/FORWARD LED
JSB [H]	JSB Ⓗ
JST. CLCK	JUST CLOCK
JST. CLK	JUST CLOCK
JST. CLOCK	JUST CLOCK
L. OUT	Lch OUTPUT
L. CH [H]	Lch Ⓗ
L. CH [L]	Lch Ⓛ
LED (MAIN)	LED (MAIN)
LED (STEREO)	LED (STEREO)
LED (SUB)	LED (SUB)
LED CKL	LED SERIAL CLOCK
LED CKS	LED SERIAL CLOCK
LED DATA	LED SERIAL DATA
LINE IN 1 [L]	LINE INPUT 1 (L)
LINE IN 1 [R]	LINE INPUT 1 (R)
LINE IN 2 [L]	LINE INPUT 2 (L)
LINE IN 2 [R]	LINE INPUT 2 (R)
LINE IN V	LINE INPUT VIDEO
LINE IN [L]	LINE INPUT (L)
LINE IN [R]	LINE INPUT (R)
LINE OUT [L]	LINE OUTPUT (L)
LINE OUT [R]	LINE OUTPUT (R)
LP [H]	LP Ⓗ

LPTRI [L]	LP TRICK PLAY Ⓛ	P. OFF [L]	POWER OFF Ⓛ
Lch/A. DUB	Lch/AUDIO DUBBING	PAL [H]	PAL Ⓗ
M GND	MOTOR GND	PAL [L]/NTSC [H]	PAL Ⓛ/NTSC Ⓗ
M REG	MOTOR REGULATOR	PB ADJ OUT	PLAYBACK ADJUST OUTPUT
MAIN OUT	MAIN OUTPUT	PB OUT	PLAYBACK OUTPUT
MAIN [L]	MAIN Ⓛ	PB. H	PLAYBACK Ⓗ
MAIN/MONO	MAIN/MONAURAL	PFG	PG/FG
MAX IN	MAXIMAM INPUT	PHOTSN +B	PHOTO SENSOR +B
MES [H]	MESECAM Ⓗ	PICT. CNT	PICTURE CONTROL
MESE [H]	MESECAM Ⓗ	PLAY LED/RVS LED	PLAY LED/REVERSE LED
MESE [L]	MESECAM Ⓛ	PLAY. PO	PLAY POSITION
METER 5V	LEVEL METER 5V	PLAY/R. LED	PLAY LED/REVERSE LED
METER [L]	LEVEL METER (L)	PLY/DEW	PLAY/DEW Ⓗ
METER [R]	LEVEL METER (R)	POWER OFF [L]	POWER OFF Ⓛ
METER. L/AVS	LEVEL METER (L)	PREROLL [H]	PREROLL Ⓗ
METER. R/AVC	LEVEL METER (R)	PWRFAIL	POWER FAILURE DETECT
MI/BI [L]	MIX Ⓗ/BILIGUAL	R. CH [H]	Rch Ⓗ
MIC GND	MIC GND	R. CH [L]	Rch Ⓛ
MIC IN	MIC INPUT	R. ST	RESET
MIC IN [L]	MIC INPUT (L)	R/S/F	REVERSE Ⓗ/STOP Ⓜ/FORWARD Ⓛ
MIC IN [R]	MIC INPUT (R)	RCH [H]	Rch Ⓗ
MIC [H]	MIC Ⓗ	REC 12V	RECORDING 12V
MIX [H]	MIX Ⓗ	REC CHROMA	RECORDING CHROMINANCE SIGNAL
MIX [H]/CINEMA [L]	MIX Ⓗ/CINEMA SOUND Ⓛ	REC H	RECORDING Ⓗ
MIX/CINE	MIX Ⓗ/CINEMA SOUND Ⓛ	REC IN	RECORDING INPUT
MIX/CINEMA [L]	MIX Ⓗ/CINEMA SOUND Ⓛ	REC OUT [L]	RECORDING OUTPUT Ⓛ
MN. H/M. L	MONAURAL Ⓗ/MAIN Ⓛ	REC START	RECORDING START
MN. H/MAI. L	MONAURAL Ⓗ/MAIN Ⓛ	REC VR [C]	RECORDING VOLUME (COMMON)
MN2/MES. L	MONAURAL 2/MESECAM Ⓛ	REC VR [L]	RECORDING VOLUME (L)
MODE SEL	AUDIO MODE SELECT	REC VR [R]	RECORDING VOLUME (R)
MODE SW	AUDIO MODE SW	REC Y	RECORDING LUMINANCE SIGNAL
MODE. S. IN	AUDIO MODE SELECT INPUT	REC [H]	RECORDING Ⓗ
MODE. S. OUT	AUDIO MODE SELECT OUTPUT	REC. C	RECORDING CHROMINANCE SIGNAL
MONO [H]	MONAURAL Ⓗ	REC. Y	RECORDING LUMINANCE SIGNAL
MONO [H]/MAIN [L]	MONAURAL Ⓗ/MAIN Ⓛ	REC/EE CTL	RECORDING/EE CONTROL
MONO2 [L]	MONAURAL 2	REEL-T	REEL PULSE (TAKE-UP)
MONO2/MESE [FM(L)]	MONAURAL 2/MESECAM (FM Ⓛ)	REEL-S	REEL PULSE (SUPPLY)
MOTOR GND	MOTOR GND	REGULATOR FILTER	REGULATOR FILTER
MUTE	MUTE	RESET	RESET
N. A. REC [L]	NORMAL AUDIO RECORDING	REV M F/R	REVIEW MOTOR
N. SW 12V	NON SW 12V		FORWARD/REVERSE
N. SW. 5. DET	NON SW 5V DETECT	REV M V1	REVIEW MOTOR V1
NICAM	NICAM	REV M V2	REVIEW MOTOR V2
NICAM [L]	NICAM Ⓛ	REV MOTOR F/R	REVIEW MOTOR
NOL [H]	PAL Ⓗ/4.43 NTSC Ⓜ/3.58 NTSC Ⓛ		FORWARD/REVERSE
NOR/SOFT [H]	NORMAL/SOFT TAPE PLAY Ⓗ	REV MOTOR V1	REVIEW MOROR V1
NORMAL [H]	NORMAL Ⓗ	REV MOTOR V2	REVIEW MOTOR V2
NR BIAS	NR BIAS	REV MOTOR [+]	REVIEW MOTOR (+)
NTSC [L]	NTSC Ⓛ	REV MOTOR [−]	REVIEW MOTOR (−)
OCH	CONTROL AGC CIRCUIT	REV. M. GND	REVIEW MOTOR GND
OUT	OUTPUT	RF. CHROMA	RF CHROMINANCE SIGNAL
P-OFF [H]	POWER OFF Ⓗ	RF OUT	RF OUTPUT
P-OFF [L]	POWER OFF Ⓛ	RF Y	RF LUMINANCE SIGNAL
P. FAIL	POWER FAILURE DETECT	RF. Y. IN	RF LUMINANCE SIGNAL INPUT
P. OFF [H]	POWER OFF Ⓗ	RF. Y. OUT	RF LUMINANCE SIGNAL OUTPUT

ROTAR. SW	ROTARY SW
ROTARY	ROTARY SW
RST	RESET
RST [L]	RESET Ⓛ
Rch/INST	Rch/INSERT
S IN	SERIAL DATA INPUT
S OUT	SERIAL DATA OUTPUT
S-PHOTO	SUPPLY PHOTO TRANSISTOR
S-RL. PLS	SUPPLY REEL PULSE
S. CLK	SERIAL CLOCK
S. CLK/AV	SERIAL CLOCK/AV
S. DATA	SERIAL DATA
S. DATA/A	SERIAL DATA
S. PHOTO	SUPPLY PHOTO TRANSISTOR
S. TAB [L]	SAFETY TAB SW ON Ⓛ
S/P/N	SECAM/PAL/NTSC
SC IN	SERIAL CLOCK INPUT
SC OUT	SERIAL CLOCK OUTPUT
SCK SELECT	SERIAL CLOCK SELECT
SEL OUT [L]	SELECT OUTPUT (L)
SEL OUT [R]	SELECT OUTPUT (R)
SHUTTLE 1	SHUTTLE 1
SIF	SOUND INTERMEDIATE FREQUENCY
SLMUT [H]	INPUT SELECT MUTE Ⓗ
SLNID [+]	SOLENOID (+)
SLNID [−]	SOLENOID (−)
SLW TR. MM	SLOW TRACKING MONO MULTI
SLW TR. REF	SLOW TRACKING REFERENCE VOLTAGE
SNS. GND	SENSOR GND
SOFT [H]	SOFT TAPE PLAY Ⓗ
SOFT [H]/NORMAL	SOFT TAPE PLAY Ⓗ/NORMAL Ⓗ
SOLENOID ON [L]	SOLENOID ON Ⓛ
SP [H]	SP Ⓗ
SP/L/SLP	SP/LP
SSS [L]	SLOW/STILL/STOP
STEREO LED	STEREO LED
STEREO [H]	STEREO Ⓗ
STEREO [L]	STEREO Ⓛ
STOP. PO	STOP POSITION
STOP/5V	STOP POSITION/5V
STOP1/TAPE SEL	STOP1 POSITION/TAPE SELECT
STOP1/PAL: ST	STOP1 POSITION/PAL
STOP2. PO	STOP 2 POSITION
STOP2/S-TAB	STOP 2 POSITION/SAFETY TAB SW
STREO [H]	STEREO Ⓗ
SUB BIAS	SUB BIAS
SUB. SW	SUB SW
SVHS CAS [L]	S-VHS CASSETTE Ⓛ
SW. 5. DET	SW 5V DETECT
SYNC [L]	SYNC Ⓛ
SYSCON 5V	SYSTEM CONTROL 5V
SYSTEM	SYSTEM SW
T-PHOTO	TAKE-UP PHOTO TRANSISTOR
T-RL. PLS	TAKE-UP REEL PULSE
T. BUSCLK	TIMER BUS CLOCK
T. BUSLSN	TIMER BUS LISTEN
T. BUSTLK	TIMER BUS TALK
T. END [L]	TAPE END Ⓛ
T. PHOTO	TAKE-UP PHOTO TRANSISTOR
TAPE END [L]	TAPE END Ⓛ
TAPE END [L]/CAM	TAPE END Ⓛ/CAMERA PAUSE
TEST	TEST MODE
TPZ	TRAPEZOIDAL WAVE CIRCUIT
TRIC [L]	TRIC PLAY Ⓛ
TRICK [L]	TRIC PLAY Ⓛ
TRK. ENV	AUTO TRACKING ENVELOPE DETECT
TU. AUDIO	TUNER AUDIO
TU. GND	TUNER GND
TU. V. IN	TUNER VIDEO SIGNAL INPUT
TU. VIDEO	TUNER VIDEO
TUN NOR IN	TUNER NORMAL INPUT
TUN R	TUNER AUDIO (R)
TUN. AUDIO IN	TUNER AUDIO INPUT
TUNER 12V	TUNER 12V
TUNER L	TUNER AUDIO (L)
TUNER V IN	TUNER VIDEO SIGNAL INPUT
TUNER [L]	TUNER AUDIO (L)
TUNER [N]	TUNER AUDIO (NORMAL)
TUNER [R]	TUNER AUDIO (R)
TUNER. 12	TUNER 12V
TUOFF [H]	TUNER OFF Ⓗ
TV. AUDIO	TV AUDIO
TV/VTR	TV/VTR
TXTON [L]	TEXT ON Ⓛ
U. REG45V	UNREGULATOR 45V
UNREG	UNREGULATOR
UNREG19V	UNREGULATOR 19V
V. REF	REFERENCE VOLTAGE
V. EE [H]	VIDEO EE Ⓗ
V. EE [L]	VIDEO EE Ⓛ
VCO REF	RERERENCE OSCILLATER
VD. IN	VIDEO SIGNAL INPUT
VD. OUT	VIDEO SIGNAL OUTPUT
VIDEO EE [L]	VIDEO EE Ⓛ
VIDEO IN	VIDEO SIGNAL INPUT
VIDEO OUT	VIDEO SIGNAL OUTPUT
VM	MOTOR VOLTAGE
VM DOWN [L]	MOTOR VOLTAGE DOWN Ⓛ
VSS	VERTICAL SYNC SIGNAL
VTR [H]	VTR Ⓗ
VTR. 12V	VTR 12V
X IN	OSCILLATOR INPUT
X OUT	OSCILLATOR OUTPUT

3-2.POWER SCHEMATIC DIAGRAM


D
C
B
A
1
2
3
4
5
P1101
VJS2625
F1101
VSF0107C16
C1101
VCC0022-C
C1106
VCC0022
C1107
VCF2AAD104M
D1116
ENB461D-05A
L1107
ELF18D222A
C1108
VCF2AAD104M
D1101
S1VBA605
C1115
ECEC2GG330B
C1116
500V1000P
R1104
27K
R1102
27K
R1103
27K
R1129
27K
R1130
27K
C1117
ECKD2H103PU
C1114
VCC0022
D1107
AP01CV2
Q1101
STP3N60
10.8
1.7
0
C1129
ECCZ3A470KGE
R1126
4700
C1111
35V47
R1117
0.51
Q1101
450Vp-p(5usec.div)
Q1101
0.7Vp-p(5usec.div)
IC1102-8
8Vp-p(5usec.div)
T1101
VLT0723=SD25EO/B,SD22EO
VLT0721=SD25EG,SD22EG
C1131
ECKR2H271KB5
D1109
AU01ZV2
C1133
ECKZ1H102ZFB
C1118
63V47
C1119
ECKR2H271KB5
D1110
RL2ZPLF-C4
L1108
VLQ04101
C1120
20V680
C1121
20V330
D1111
MA185TA5
D1112
11EQS04TA1
C1123
20V330
C1122
35V82
L1109
ELELN22OKA
C1124
10V330
D1113
11EQS04TA1
C1125
10V330
L1110
ELESN101KA
R1114
ERDS1VJ472T
C1139
ECKZ1H103ZFB
13.8
12.2
12.8
Q1106
2SD2375
12.8
5.7
5.0
Q1105
2SD1991-TA
C1127
ECKZ1H102ZFB
R1118
2700
C1128
ECA1CGE101XB
R1119
2400
C1134
ECKZ1H103ZFB
C1135
ECKZ1H103ZFB
C1137
ECKZ1H103ZFB
D1114
MA178TA5
D1115
MA178TA5
D1118
MA178TA5
P1102
VJS1683
1 UNREG 45V
2 NON SW 12V
3 P.OFF(L)
4 UNREG 14V
5 REG 12.3V
6 MOTOR GND
7 S NON SW 5V
8 V NON SW 5V
9 GND
10 GND
11 UNREG -29V
12 HEATER(+)
13 HEATER(-)
TO LUMINANCE &
CHROMINANCE
SECTION P1001
(Page:3-20 / A-5
R1115
1M
C1136
50V47
R1105
160K
C1109
0.1
L1114
EXCEL5A35
R1124
10
D1106
1N4148S
R1128
10K
C1110
390P
IC1102
TDA4605
ZERO CROSSING
SMFT START
SUPPLY VOLT
OUT PUT
REG INPUT
PRIM CUR SIM
PRIM VOLT SENSE
GND
0.4
1.3
9.4
1.7
0.3
1.0
1.7
R1120
560K
R1121
820K
C1130
3300P
IC1102-2
0.55Vp-p(20usec.div)
IC1102-5
5Vp-p(5usec.div)
C1138
1000P
QR1101
DTA114YLTL2
1.6
1.6
0.2
Q1107
2SD1991-TA
0.2
1.6
R1106
220
R1107
3600
R1122
2200
C1140
0.22
IC1102-1
160mVp-p(50usec.div)
IC1102-3
0.3Vp-p(1usec.div)
9.4
5.1
4.4
4.1
Q1103
PS2561L1V1VL
R1108
1K
C1126
0.082
R1111
2700
IC1101
HA17431PA-TZ
K
A
R
2.7
2.4
R1112
2700
R1113
27K

NOTE 1. WHEN MEASURE THE VOLTAGE OR WAVEFORM ON THE POWER TRANSFORMER CIRCUIT, SET THE GND TERMINAL OF MEASURING POINT AS FOLLOWS.
PRIMARY SIDE............... IC1101-(4)
SECONDARY SIDE.......... TP GND OF MAIN C.B.A.

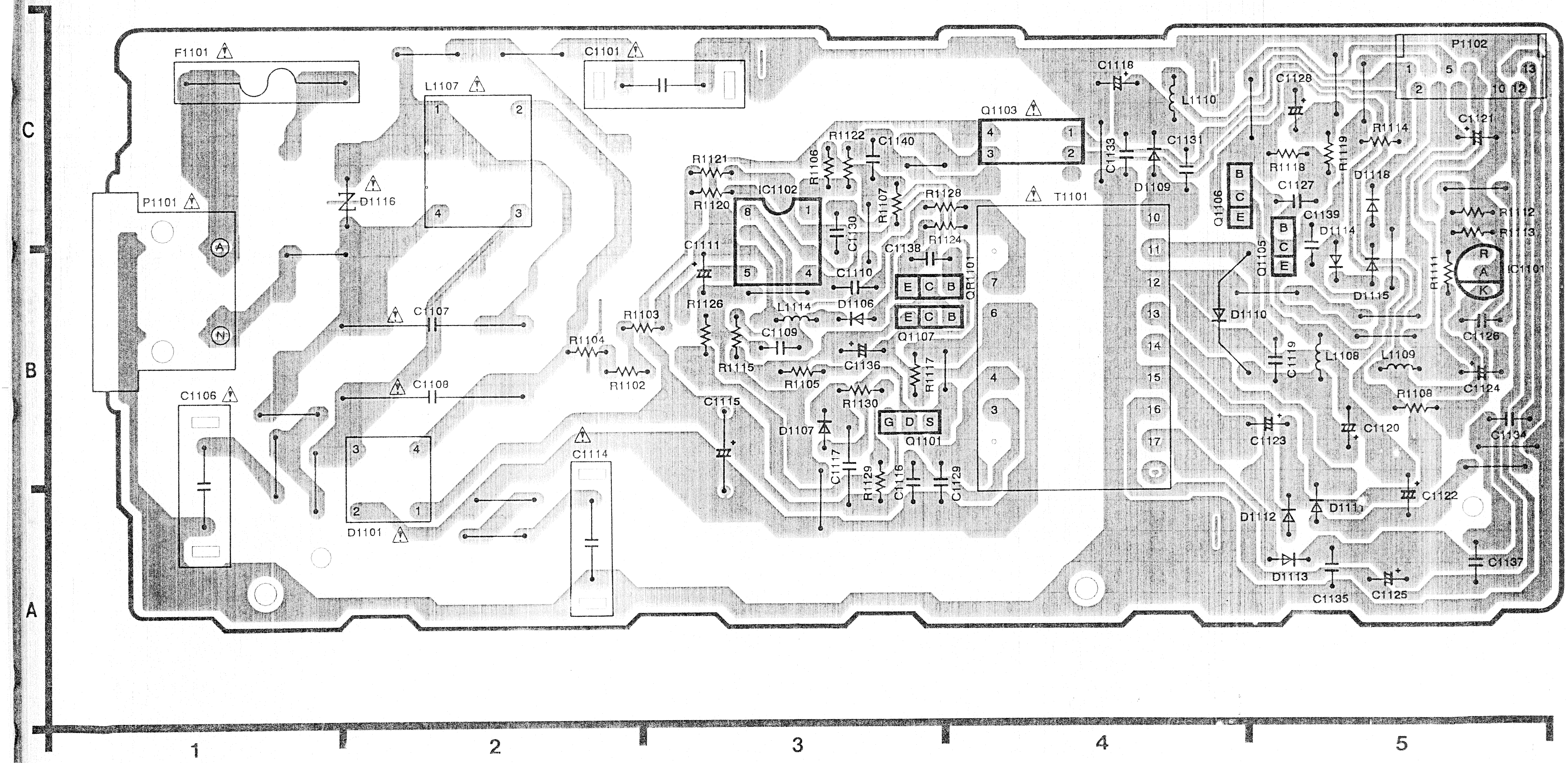
NOTE 2. THE DC VOLTAGE INDICATED IN PRIMARY SIDE IS SHOWN THE VOLTAGE WHEN INPUT AC IS 240V.

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE

3-3.POWER C.B.A.(VEP01583A : NV-SD22EO, SD25EO/B)
(VEP01583B : NV-SD22EG, SD25EG)

POWER C. B. A.			
Transistor		Integrated Circuit	
Q1101 Q1103 Q1105 Q1106 Q1107	B-3 C-4 B-5 C-4 B-3	IC1101 IC1102	B-5 C-3
		Connector	
Transistor & Resistor		P1101 P1102	C-1 C-5
QR1101	B-4		

ADDRESS INFORMATION


C
B
A
1
2
3
4
5
F1101
C1101
L1107
P1101
D1116
C1107
C1108
C1106
C1114
D1101
R1121
R1120
R1122
C1140
R1106
IC1102
C1130
R1107
R1128
R1124
C1111
C1138
C1110
R1126
L1114
D1106
R1103
R1104
R1102
C1109
R1115
R1105
C1136
Q1107
R1117
R1130
C1115
D1107
Q1101
C1117
R1129
C1116
C1129
QR1101
Q1103
T1101
C1118
L1110
C1133
C1131
D1109
C1128
R1118
R1119
R1114
C1121
Q1106
C1127
C1139
Q1105
D1114
D1118
D1115
R1111
R1112
R1113
IC1101
D1110
C1119
L1108
L1109
C1126
C1124
R1108
C1123
C1120
C1134
C1122
D1112
D1111
D1113
C1135
C1125
C1137
P1102
A
N
R
A
K
G D S
E C B
B C E

SYSTEM CONTROL & SERVO ICs VOLTAGE CHART (SP MODE)

REF. NO.	IC6001																	
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
STOP	4.3	5.0	0	0	0	5.0	0	0	0	5.0	5.0	0	0	0	0	2.5	4.8	5.0
PLAY	4.2	5.0	0	0	4.9	5.0	0	0	0	5.0	5.0	0	0	0	0	2.4	4.7	5.0
REC	0	4.9	0	0	4.9	5.0	0	0	0	3.9	5.0	0	0	0	0	2.4	4.7	4.9
F.F	4.2	5.0	5.0	0	—	5.0	0	0	0	5.0	5.0	0	0	0	0	2.4	4.7	4.9
REW	4.2	5.0	5.0	0	—	5.0	0	0	0	5.0	5.0	0	0	0	0	0	4.7	4.8

REF. NO.	IC6001																	
MODE	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
STOP	5.0	0	5.0	5.0	0.1	2.3	2.2	2.4	2.4	2.5	0	2.5	2.3	2.6	4.9	0	0	0
PLAY	5.0	0	5.0	5.0	2.6	0	2.2	2.4	2.4	2.4	0	2.4	2.6	2.5	4.9	0	0	0
REC	4.9	0	5.0	5.0	2.5	2.3	0	2.4	2.4	2.4	0	2.4	2.3	2.5	4.9	3.1	3.1	0
F.F	2.5	0	5.0	5.0	2.1	2.3	2.0	2.4	2.4	2.4	0	2.4	2.4	2.5	4.9	0	0	0
REW	2.4	0	5.0	5.0	2.4	2.3	3.3	2.4	2.4	2.4	0	2.4	2.4	2.5	4.9	0	0	0

REF. NO.	IC6001																	
MODE	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
STOP	2.5	2.4	0	2.4	2.4	5.0	1.2	3.3	0	4.3	5.0	5.0	0	5.0	0	5.0	5.0	5.0
PLAY	2.4	2.4	0	2.8	2.4	4.9	1.2	3.3	3.9	4.4	5.0	5.0	0	0	0	5.0	5.0	0
REC	2.4	2.4	0	2.4	2.4	4.9	1.2	3.7	0	4.4	5.0	4.9	0	0	4.6	5.0	5.0	0
F.F	2.4	2.4	0	2.9	2.4	4.9	1.2	3.7	0	4.1	5.0	5.0	0	5.0	0	0	5.0	0
REW	2.4	0	0	2.9	2.4	4.9	1.3	3.7	0	4.4	4.9	5.0	0	5.0	0	5.0	5.0	0

REF. NO.	IC6001																	
MODE	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72
STOP	4.9	0	5.0	0	0	2.5	5.0	2.0	4.5	4.6	0	0	0	0	0	5.0	0	5.0
PLAY	4.9	0	5.0	0	0	2.4	4.9	0	4.5	4.2	0	0	0	0	0	5.0	0	0
REC	4.9	0	5.0	0	0	2.4	4.9	0	4.5	4.4	5.0	4.9	5.0	5.0	5.0	5.0	0	0
F.F	0	0	5.0	0	0	2.4	5.0	0	4.5	4.5	0	0	0	0	0	5.0	0	0
REW	0	0	5.0	0	0	2.4	5.0	5.0	0	4.4	0	0	0	0	0	5.0	0	5.0

SYSTEM CONTROL & SERVO ICs VOLTAGE CHART (SP MODE)

REF. NO.	IC6001											
MODE	73	74	75	76	77	78	79	80	81	82	83	84
STOP	5.0	0	0	4.9	0	0	5.0	0	0	2.4	2.5	4.3
PLAY	0	0	0	4.9	0	4.9	5.0	0	0	2.5	2.5	4.3
REC	5.0	0	0	4.9	0	0	5.0	0	0	2.5	2.5	4.3
F.F	5.0	0	0	0	0	0	0	5.0	0	2.5	2.5	4.3
REW	5.0	0	0	0	0	0	5.0	0	0	2.5	2.5	4.3

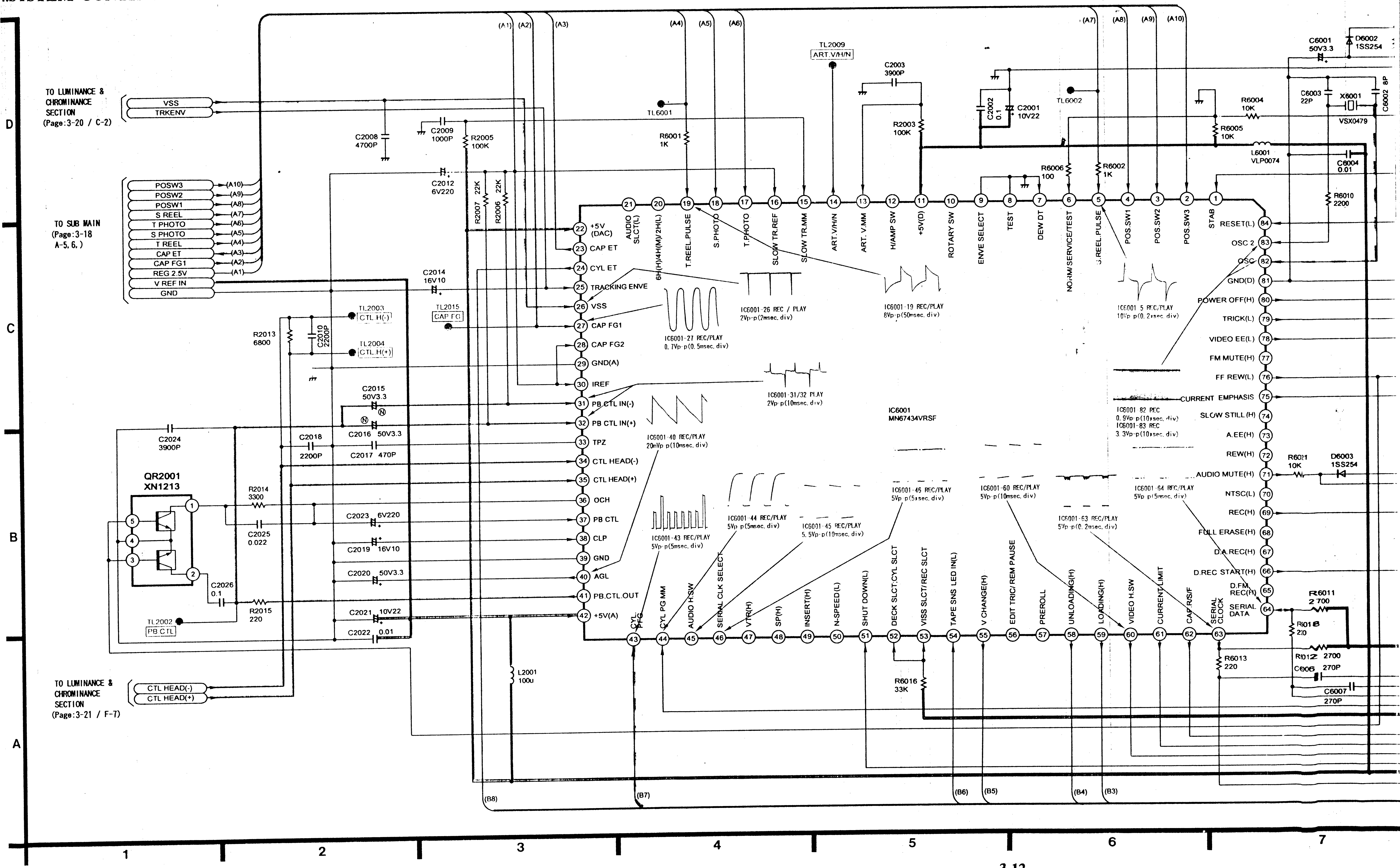
SYSTEM CONTROL & SERVO TRANSISTORs DC VOLTAGE CHART (SP MODE)

REF. NO.	QR2001					QR2002		
MODE	1	2	3	4	5	E	C	B
STOP	0	0	4.9	0	4.9	5.0	4.6	5.0
PLAY	0	0	4.9	0	4.9	5.0	4.6	5.0
REC	0	0	4.9	0	4.9	5.0	4.6	5.0
F.F	0	0.7	0	0	0	5.0	4.6	5.0
REW	0	0.7	0	0	0	5.0	4.6	5.0

3-4.SYSTEM CONTROL & SERVO SECTION IN MAIN SCHEMATIC DIAGRAM

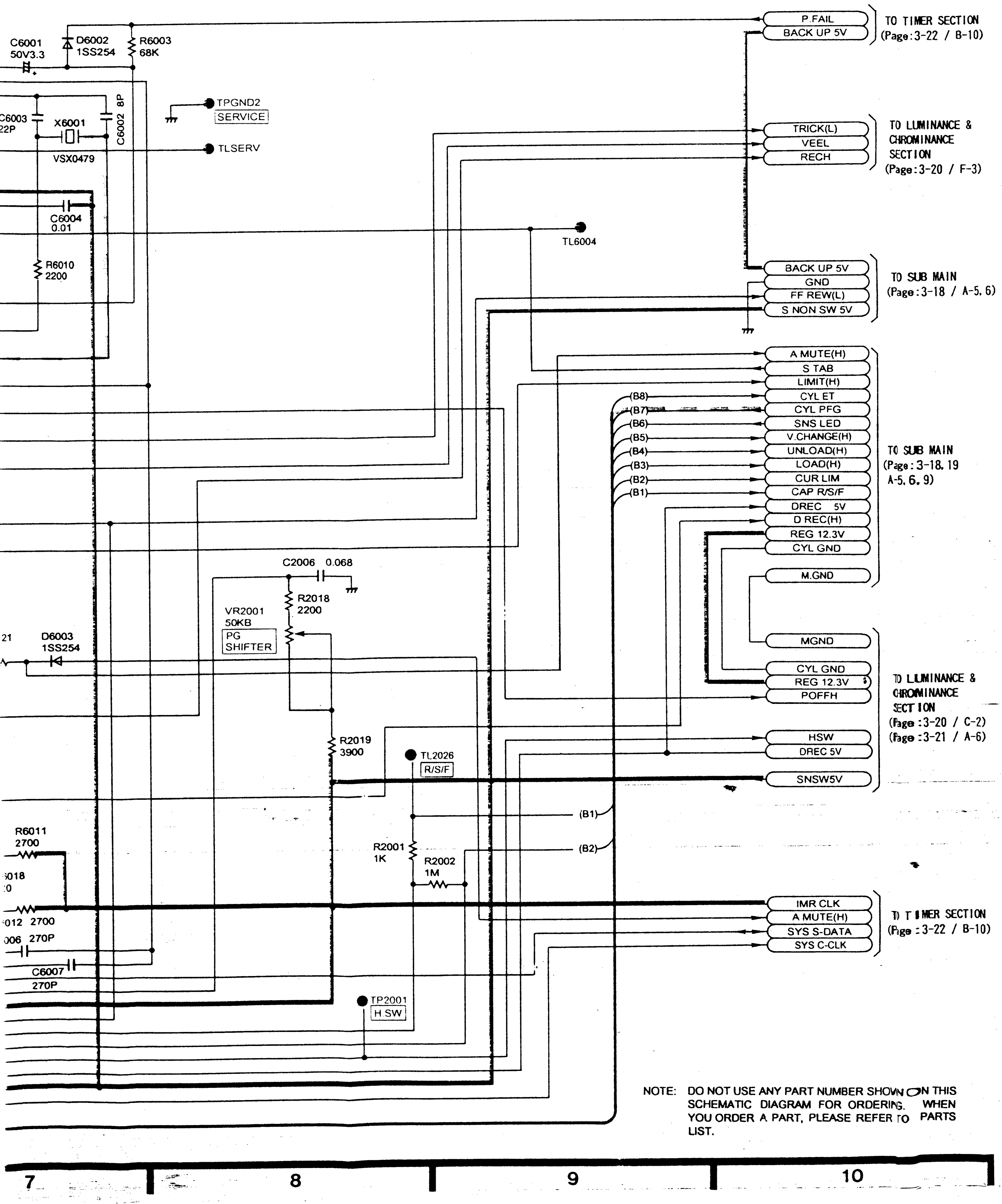
CAPSTAN SERVO PHASE LOOP

CYLINDER SERVO PHASE LOOP


TO LUMINANCE & CHROMINANCE SECTION (Page:3-20 / C-2)
VSS
TRKENV
TO SUB MAIN (Page:3-18 A-5, 6,)
POSW3
POSW2
POSW1
S REEL
T PHOTO
S PHOTO
T REEL
CAP ET
CAP FG1
REG 2.5V
V REF IN
GND
(A1) (A2) (A3) (A4) (A5) (A6) (A7) (A8) (A9) (A10)
C2008 4700P
C2009 1000P
R2005 100K
C2012 6V220
R2007 22K
R2006 22K
C2014 16V10
TL2015 CAP FG
TL2003 CTL H(-)
TL2004 CTL H(+)
R2013 6800
C2010 2200P
C2015 50V3.3
C2016 50V3.3
C2018 2200P
C2017 470P
C2024 3900P
QR2001 XN1213
R2014 3300
C2025 0.022
C2023 6V220
C2019 16V10
C2020 50V3.3
C2026 0.1
R2015 220
C2021 10V22
C2022 0.01
TL2002 PB CTL
L2001 100u
TO LUMINANCE & CHROMINANCE SECTION (Page:3-21 / F-7)
CTL HEAD(-)
CTL HEAD(+)
TL6001
R6001 1K
TL2009 ART.V/H/N
C2003 3900P
R2003 100K
C2002 0.1
C2001 10V22
TL6002
R6006 100
R6002 1K
R6004 10K
R6005 10K
L6001 VLP0074
C6001 50V3.3
D6002 1SS254
C6003 22P
X6001 VSX0479
C6002 8P
C6004 0.01
R6010 2200
R6021 10K
D6003 1SS254
R6011 2700
R6018 220
R6012 2700
C6006 270P
C6007 270P
R6013 220
R6016 33K
IC6001 MN67434VRSF
1 STAB
2 POS.SW3
3 POS.SW2
4 POS.SW1
5 S.REEL.PULSE
6 NORM/SERVICE/TEST
7 DEW DT
8 TEST
9 ENVE SELECT
10 ROTARY SW
11 +5V(D)
12 H/AMP SW
13 ART. V.MM
14 ART.V/H/N
15 SLOW TR.MM
16 SLOW TR.REF
17 T.PHOTO
18 S.PHOTO
19 T.REEL.PULSE
20 6H(H)/4H(M)/2H(L)
21 AUDIO SLCT(L)
22 +5V (DAC)
23 CAP ET
24 CYL ET
25 TRACKING ENVE
26 VSS
27 CAP FG1
28 CAP FG2
29 GND(A)
30 IREF
31 PB CTL IN(-)
32 PB CTL IN(+)
33 TPZ
34 CTL HEAD(-)
35 CTL HEAD(+)
36 OCH
37 PB CTL
38 CLP
39 GND
40 AGL
41 PB.CTL.OUT
42 +5V(A)
43 CYL PFG
44 CYL PG MM
45 AUDIO H.SW
46 SERIAL CLK SELECT
47 VTR(H)
48 SP(H)
49 INSERT(H)
50 N-SPEED(L)
51 SHUT DOWN(L)
52 DECK SLCT;CYL SLCT
53 VISS SLCT/REC SLCT
54 TAPE SNS LED IN(L)
55 V CHANGE(H)
56 EDIT TRIC/REM PAUSE
57 PREROLL
58 UNLOADING(H)
59 LOADING(H)
60 VIDEO H.SW
61 CURRENT LIMIT
62 CAP.R/S/F
63 SERIAL CLOCK
64 SERIAL DATA
65 D.FM. REC(H)
66 D.REC START(H)
67 D.A.REC(H)
68 FULL ERASE(H)
69 REC(H)
70 NTSC(L)
71 AUDIO MUTE(H)
72 REW(H)
73 A.EE(H)
74 SLOW STILL (H)
75 CURRENT EMPHASIS
76 FF REW(L)
77 FM MUTE(H)
78 VIDEO EE(L)
79 TRICK(L)
80 POWER OFF(H)
81 GND(D)
82 OSC
83 OSC 2
84 RESET(L)
IC6001-26 REC / PLAY 2Vp-p(2msec. div)
IC6001-19 REC/PLAY 8Vp-p(50msec. div)
IC6001 5 REC/PLAY 10Vp-p(0. 2msec. div)
IC6001-27 REC/PLAY 0. 7Vp-p(0. 5msec. div)
IC6001-31/32 PLAY 2Vp-p(10msec. div)
IC6001 82 REC 0. 9Vp-p(10msec. div)
IC6001-83 REC 3. 3Vp-p(10msec. div)
IC6001-40 REC/PLAY 20mVp-p(10msec. div)
IC6001-45 REC/PLAY 5Vp-p(5msec. div)
IC6001-60 REC/PLAY 5Vp-p(10msec. div)
IC6001-64 REC/PLAY 5Vp-p(5msec. div)
IC6001-44 REC/PLAY 5Vp-p(5msec. div)
IC6001-45 REC/PLAY 5. 5Vp-p(10msec. div)
IC6001-63 REC/PLAY 5Vp-p(0. 2msec. div)
IC6001-43 REC/PLAY 5Vp-p(5msec. div)
(B8) (B7) (B6) (B5) (B4) (B3)
D
C
B
A
1
2
3
4
5
6
7

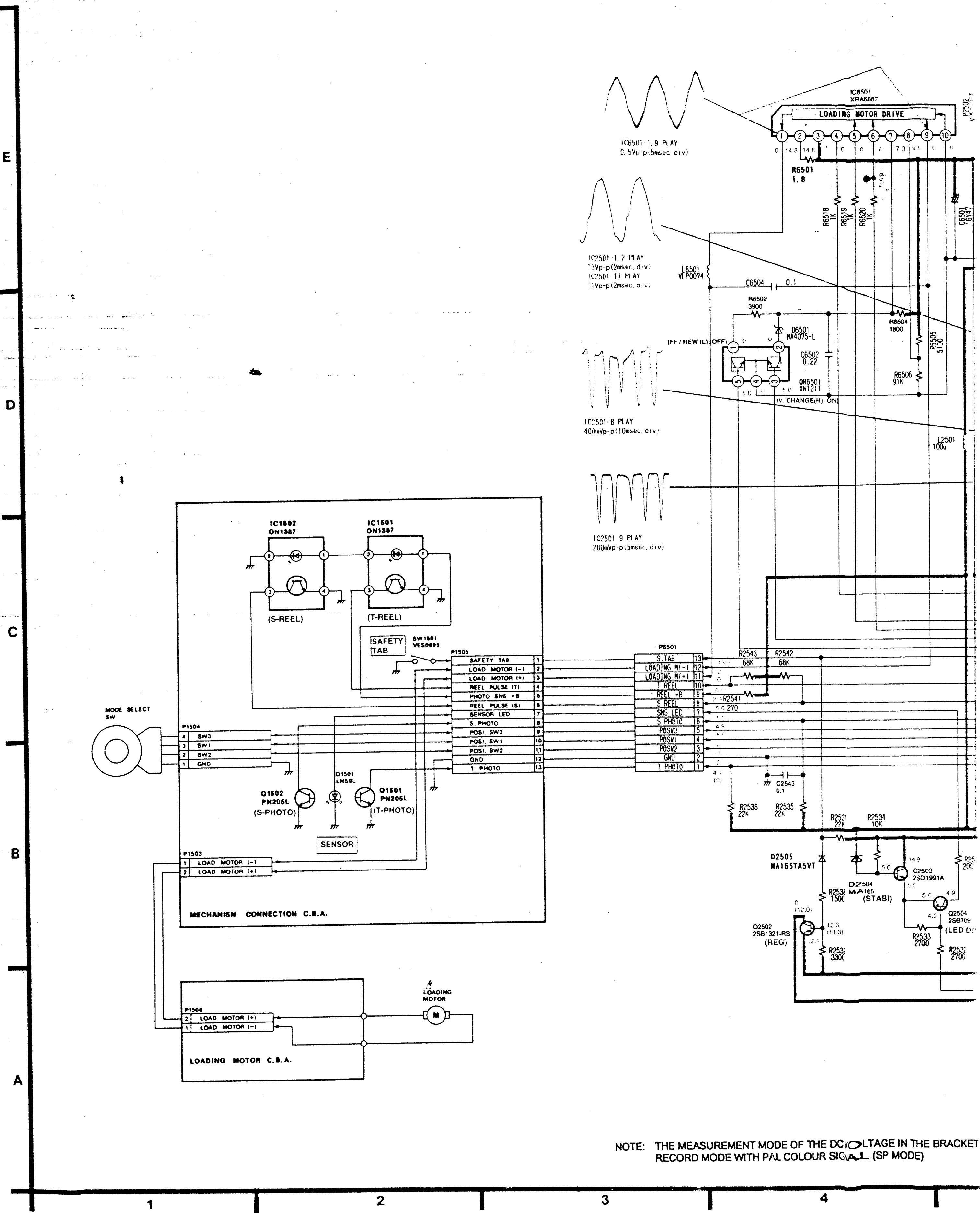
CAPSTAN SERVO SPEED LOOP

CYLINDER SERVO SPEED LOOP


C6001
50V3.3
D6002
1SS254
R6003
68K
C6003
22P
X6001
VSX0479
C6002 8P
TPGND2
SERVICE
TLSERV
C6004
0.01
R6010
2200
TL6004
P.FAIL
BACK UP 5V
TO TIMER SECTION
(Page:3-22 / B-10)
TRICK(L)
VEEL
RECH
TO LUMINANCE & CHROMINANCE SECTION
(Page:3-20 / F-3)
BACK UP 5V
GND
FF REW(L)
S NON SW 5V
TO SUB MAIN
(Page:3-18 / A-5, 6)
A MUTE(H)
S TAB
LIMIT(H)
CYL ET
CYL PFG
SNS LED
V.CHANGE(H)
UNLOAD(H)
LOAD(H)
CUR LIM
CAP R/S/F
DREC 5V
D REC(H)
REG 12.3V
CYL GND
M.GND
TO SUB MAIN
(Page:3-18, 19
A-5, 6, 9)
(B8)
(B7)
(B6)
(B5)
(B4)
(B3)
(B2)
(B1)
C2006 0.068
R2018
2200
VR2001
50KB
PG SHIFTER
D6003
1SS254
R2019
3900
TL2026
R/S/F
MGND
CYL GND
REG 12.3V
POFFH
HSW
DREC 5V
SNSW5V
TO LUMINANCE & CHROMINANCE SECTION
(Page:3-20 / C-2)
(Page:3-21 / A-6)
(B1)
(B2)
R6011
2700
R2001
1K
R2002
1M
2700
270P
C6007
270P
TP2001
H SW
IMR CLK
A MUTE(H)
SYS S-DATA
SYS C-CLK
TO TIMER SECTION
(Page:3-22 / B-10)
7
8
9
10

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

.SUB MAIN SCHEMATIC DIAGRAM


E
D
C
B
A
1
2
3
4
IC6501-1, 9 PLAY
0.5Vp-p(5msec div)
IC2501-1, 2 PLAY
13Vp-p(2msec div)
IC2501-17 PLAY
11Vp-p(2msec div)
IC2501-8 PLAY
400mVp-p(10msec div)
IC2501 9 PLAY
200mVp-p(5msec div)
IC6501
XRA6887
LOADING MOTOR DRIVE
R6501
1.8
R6518 1K
R6519 1K
R6520 1K
C6501
L6501
VLP0074
C6504 0.1
R6502
3900
R6504
1800
R6505
5100
D6501
MA4075-L
(FF/REW(L):OFF)
C6502
0.22
QR6501
XN1211
R6506
91K
(V CHANGE(H):ON)
L2501
100u
IC1502
ON1387
IC1501
ON1387
(S-REEL)
(T-REEL)
SAFETY TAB
SW1501
VES0695
P1505
SAFETY TAB
LOAD MOTOR (-)
LOAD MOTOR (+)
REEL PULSE (T)
PHOTO SNS +B
REEL PULSE (S)
SENSOR LED
S PHOTO
POSI SW3
POSI SW1
POSI SW2
GND
T PHOTO
MODE SELECT SW
P1504
SW3
SW1
SW2
GND
Q1502
PN205L
(S-PHOTO)
D1501
LN59L
Q1501
PN205L
(T-PHOTO)
SENSOR
P1503
LOAD MOTOR (-)
LOAD MOTOR (+)
MECHANISM CONNECTION C.B.A.
P6501
S.TAB
LOADING.M(-)
LOADING.M(+)
T REEL
REEL +B
S REEL
SNS LED
S PHOTO
POSW3
POSW1
POSW2
GND
T PHOTO
R2543
68K
R2542
68K
R2541
270
C2543
0.1
R2536
22K
R2535
22K
R2531
22K
R2534
10K
D2505
MA165TA5VT
D2504
MA165
(STABI)
Q2503
2SD1991A
R2538
1500
Q2502
2SB1321-RS
(REG)
R2539
3300
Q2504
2SB709
(LED D
R2533
2700
R2532
2700
P1506
LOAD MOTOR (+)
LOAD MOTOR (-)
LOADING MOTOR
M
LOADING MOTOR C.B.A.

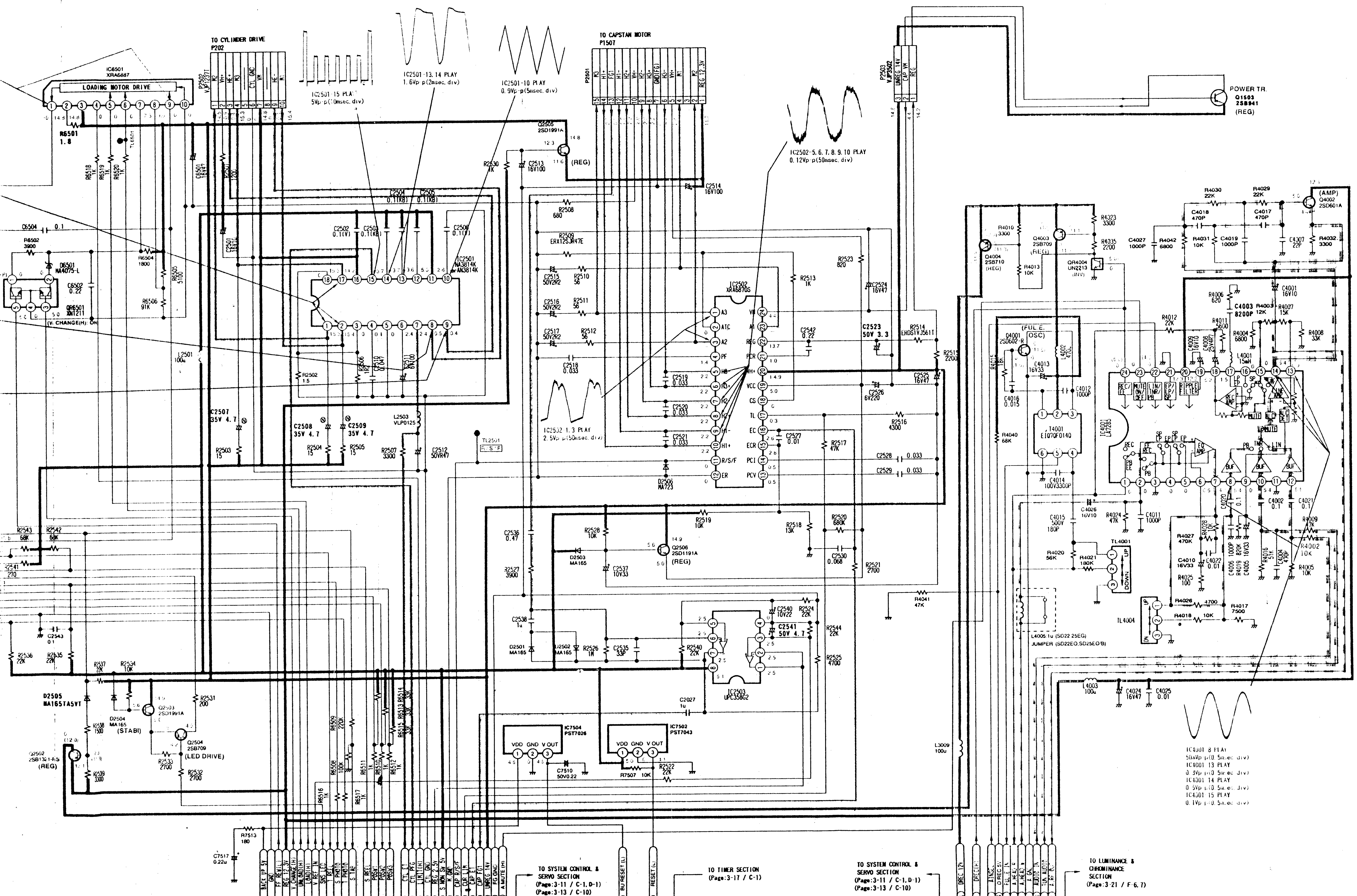
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKET
RECORD MODE WITH PAL COLOUR SIGNAL (SP MODE)

CAPSTAN SERVO PHASE LOOP

CAPSTAN SERVO SPEED LOOP

AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE

AUDIO MAIN SIGNAL PATH IN REC M



TO CYLINDER DRIVE
P202
IC6501
XRA6887
LOADING MOTOR DRIVE
R6501
1.8
IC2501-15 PLAY
5Vp-p(10msec. div)
IC2501-13, 14 PLAY
1.6Vp-p(2msec. div)
IC2501-10 PLAY
0.9Vp-p(5msec. div)
TO CAPSTAN MOTOR
P1507
Q2505
2SD1991A
(REG)
IC2501
AN3814K
IC2502
XRA6875
IC2502-5, 6, 7, 8, 9, 10 PLAY
0.12Vp-p(50msec. div)
IC2532-1, 3 PLAY
2.5Vp-p(50msec. div)
(V. CHANGE(H): ON)
D6501
MA4075-L
QR6501
XN1211
C2507
35V 4.7
C2508
35V 4.7
C2509
35V 4.7
L2503
VLP0125
TL2501
C2523
50V 3.3
Q2506
2SD1191A
(REG)
D2503
MA165
IC2503
UPC3580
D2501
MA165
D2505
MA165TA5VT
Q2503
2SD1991A
(STABI)
Q2504
2SB709
(LED DRIVE)
Q2502
2SB1321-FS
(REG)
IC7504
PST7026
IC7502
PST7043
VDD GND V OUT
POWER TR.
Q1503
2SB941
(REG)
(AMP)
Q4002
2SD601A
Q4003
2SB709
(REG)
Q4004
2SB710
(REG)
QR4004
UN2213
(INV)
Q4001
2SD602-R
(FULL E. OSC)
T4001
EI070F0140
IC4001
LA7285
TL4001
TL4004
L4005 1u (SD22 25EG)
JUMPER (SD22EO,SD25EO'B)
IC4001 8 PLAY
IC4001 13 PLAY
IC4001 14 PLAY
IC4001 15 PLAY
TO SYSTEM CONTROL &
SERVO SECTION
(Page:3-11 / C-1, D-1)
(Page:3-13 / C-10)
TO TIMER SECTION
(Page:3-17 / C-1)
TO SYSTEM CONTROL &
SERVO SECTION
(Page:3-11 / C-1, D-1)
(Page:3-13 / C-10)
TO LUMINANCE &
CHROMINANCE
SECTION
(Page:3-21 / F 6, 7)

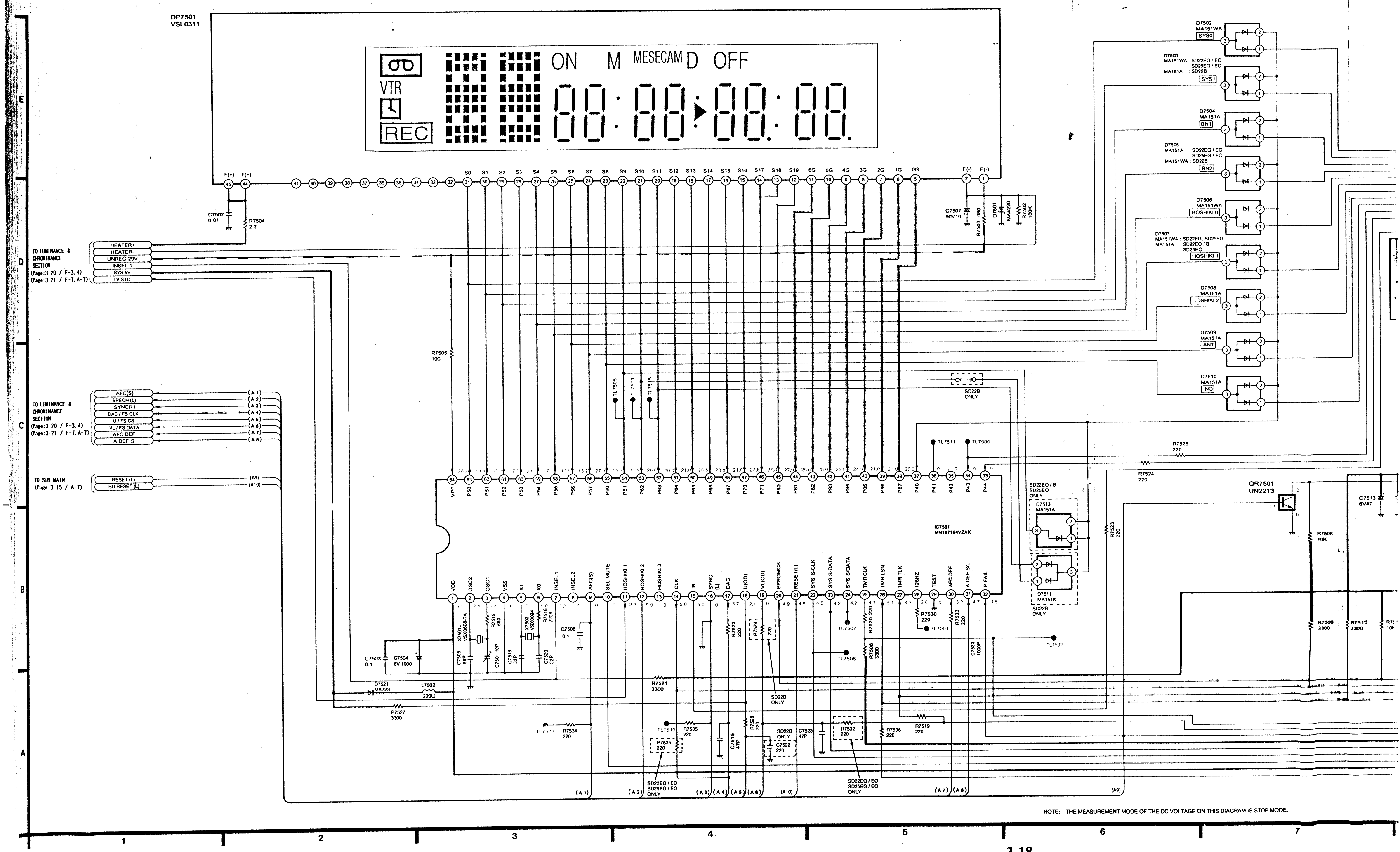
EMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS
DE WITH PAL COLOUR SIGNAL. (SP MODE)

THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS
PLAYBACK MODE WITH PAL COLOUR SIGNAL. (SP MODE)

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

4 5 6 7 8 9 10 11

3-6.TIMER SECTION IN MAIN & OPERATION SCHEMATIC DIAGRAM

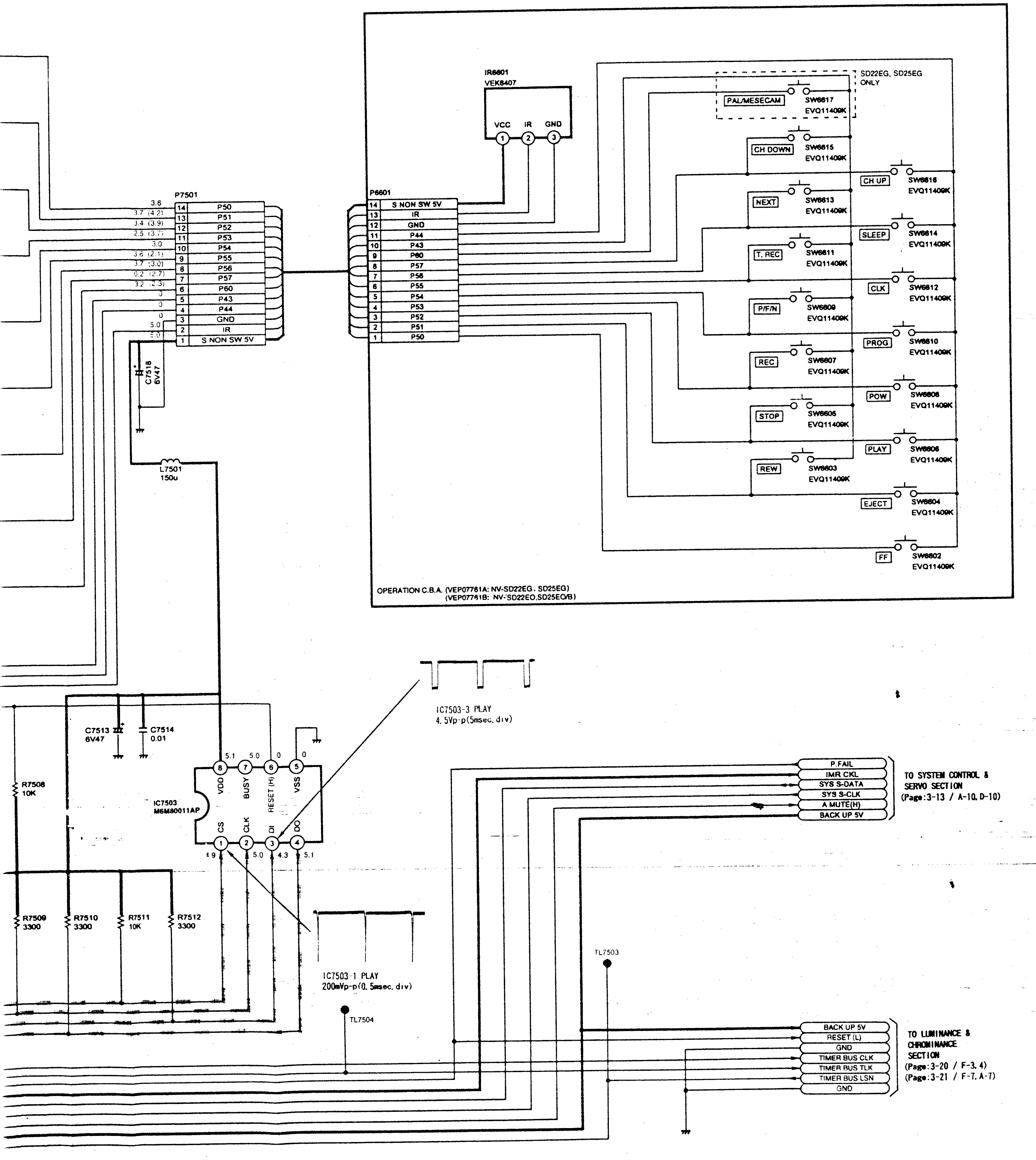


GRID CONTROL SIGNAL
DP7501
VSL0311
ON
M
MESECAM
D
OFF
VTR
REC
IC7501
MN187164VZAK
QR7501
UN2213
TO LUMINANCE & CHROMINANCE SECTION (Page:3-20 / F-3, 4) (Page:3-21 / F-7, A-7)
HEATER+
HEATER-
UNREG-29V
INSEL 1
SYS 5V
TV STD
AFC(S)
SPECH (L)
SYNC(L)
DAC / FS CLK
U / FS CS
VL / FS DATA
AFC DEF
A.DEF S
TO SUB MAIN (Page:3-15 / A-7)
RESET (L)
BU RESET (L)
D7502 MA151WA SYS0
D7503 MA151WA : SD22EG / EO SD25EG / EO MA151A : SD22B SYS1
D7504 MA151A BN1
D7505 MA151A : SD22EG / EO SD25EG / EO MA151WA : SD22B BN2
D7506 MA151WA HOSHIKI 0
D7507 MA151WA : SD22EG, SD25EG MA151A : SD22EG / B SD25EO HOSHIKI 1
D7508 MA151A HOSHIKI 2
D7509 MA151A ANT
D7510 MA151A INO
D7511 MA151K SD22B ONLY
D7513 MA151A
SD22EO / B SD25EO ONLY
SD22B ONLY
SD22EG / EO SD25EG / EO ONLY
VDD
OSC2
OSC1
VSS
X1
X0
INSEL1
INSEL2
AFC(S)
SEL MUTE
HOSHIKI 1
HOSHIKI 2
HOSHIKI 3
CLK
IR
SYNC (L)
DAC
U(OD)
VL(OD)
EPROMCS
RESET(L)
SYS S-CLK
SYS S-DATA
SYS SDATA
TMR CLK
TMR LSN
TMR TLK
128HZ
TEST
AFC DEF
A.DEF S/L
P.FAIL
VPP
C7502 0.01
R7504 2.2
C7507 50V10
R7503 680
D7501 MA4220
R7502 100K
R7505 100
C7503 0.1
C7504 6V 1000
D7521 MA723
L7502 220U
R7527 3300
X7501 VSX0808-TA
C7505 56P
R7515 680
C7501 10P
C7519 33P
X7502 VSX0094
R7516 220K
C7520 22P
C7508 0.1
R7521 3300
R7522 220
R7529 220
R7520 220
R7506 3300
R7530 220
R7533 220
C7523 100P
R7534 220
R7535 220
R7533 220
C7515 47P
R7528 220
C7523 47P
C7522 220
R7532 220
R7536 220
R7519 220
R7525 220
R7524 220
R7523 220
C7513 6V47
R7508 10K
R7509 3300
R7510 3300

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

SEGMENT CONTROL SIGNAL

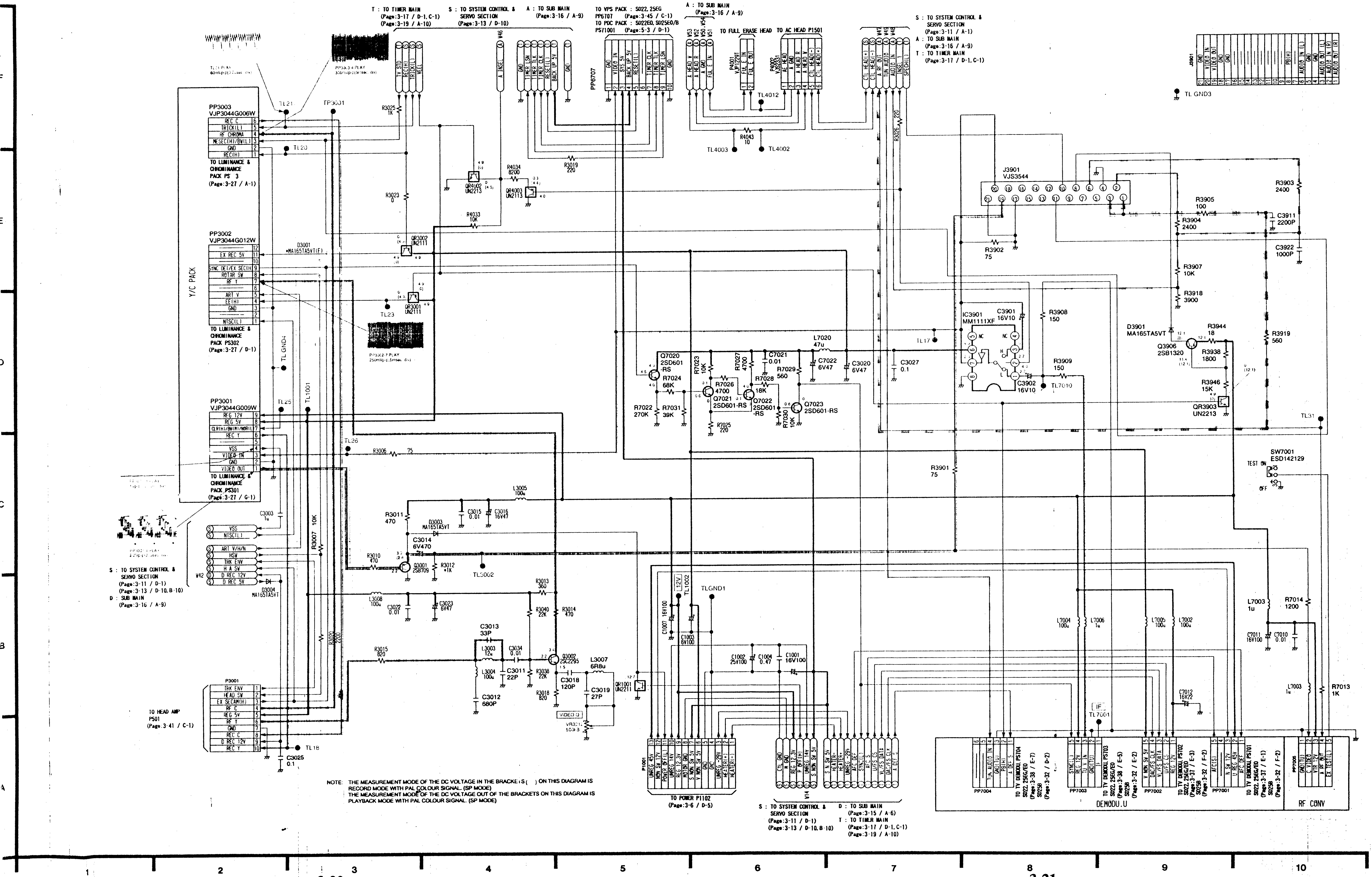
TUNE CONTROL SIGNAL


IR6601
VEK6407
VCC
IR
GND
SD22EG, SD25EG ONLY
PAL/MESECAM
SW6617 EVQ11409K
CH DOWN
SW6615 EVQ11409K
CH UP
SW6616 EVQ11409K
NEXT
SW6613 EVQ11409K
SLEEP
SW6614 EVQ11409K
T. REC
SW6611 EVQ11409K
CLK
SW6612 EVQ11409K
P/F/N
SW6609 EVQ11409K
PROG
SW6610 EVQ11409K
REC
SW6607 EVQ11409K
POW
SW6608 EVQ11409K
STOP
SW6605 EVQ11409K
PLAY
SW6606 EVQ11409K
REW
SW6603 EVQ11409K
EJECT
SW6604 EVQ11409K
FF
SW6602 EVQ11409K
P7501
P50
P51
P52
P53
P54
P55
P56
P57
P60
P43
P44
GND
IR
S NON SW 5V
P6601
S NON SW 5V
IR
GND
P44
P43
P60
P57
P56
P55
P54
P53
P52
P51
P50
3.6
3.7 (4.2)
3.4 (3.9)
2.5 (3.7)
3.0
3.6 (2.1)
3.7 (3.0)
0.2 (2.7)
3.2 (2.3)
0
0
0
5.0
5.0
C7518 6V47
L7501 150u
OPERATION C.B.A. (VEP07761A: NV-SD22EG, SD25EG)
(VEP07761B: NV-SD22EO,SD25EO/B)
IC7503-3 PLAY
4.5Vp-p(5msec. div)
C7513 6V47
C7514 0.01
R7508 10K
IC7503 M6M80011AP
VDD
BUSY
RESET (H)
VSS
CS
CLK
DI
DO
5.1
5.0
0
0
4.9
5.0
4.3
5.1
P.FAIL
IMR CKL
SYS S-DATA
SYS S-CLK
A MUTE(H)
BACK UP 5V
TO SYSTEM CONTROL & SERVO SECTION (Page:3-13 / A-10, D-10)
R7509 3300
R7510 3300
R7511 10K
R7512 3300
IC7503-1 PLAY
200mVp-p(0.5msec. div)
TL7504
TL7503
BACK UP 5V
RESET (L)
GND
TIMER BUS CLK
TIMER BUS TLK
TIMER BUS LSN
GND
TO LUMINANCE & CHROMINANCE SECTION (Page:3-20 / F-3, 4) (Page:3-21 / F-7, A-7)

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

3-7.LUMINANCE & CHROMINANCE SECTION IN MAIN SCHEMATIC DIAGRAM

VIDEO MAIN SIGNAL PATH IN REC MODE — VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE — AUDIO MAIN SIGNAL PATH IN REC MODE — AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE


T : TO TIMER MAIN (Page:3-17 / D-1, C-1) (Page:3-19 / A-10)
S : TO SYSTEM CONTROL & SERVO SECTION (Page:3-13 / D-10)
A : TO SUB MAIN (Page:3-16 / A-9)
TO VPS PACK : S022, 25EG PP6707 (Page:3-45 / C-1)
TO PDC PACK : S022EO, S025EO/B PS71001 (Page:5-3 / D-1)
TO FULL ERASE HEAD
TO AC HEAD P1501
PP3003 VJP3044G006W
TO LUMINANCE & CHROMINANCE PACK PS 3 (Page:3-27 / A-1)
PP3002 VJP3044G012W
TO LUMINANCE & CHROMINANCE PACK PS302 (Page:3-27 / D-1)
Y/C PACK
PP3001 VJP3044G009W
TO LUMINANCE & CHROMINANCE PACK PS301 (Page:3-27 / G-1)
S : TO SYSTEM CONTROL & SERVO SECTION (Page:3-11 / D-1) (Page:3-13 / D-10, B-10)
D : SUB MAIN (Page:3-16 / A-9)
TO HEAD AMP P501 (Page:3-41 / C-1)
J3901 VJS3544
IC3901 MM1111XF
Q7020 2SD601-RS
Q7021 2SD601-RS
Q7022 2SD601-RS
Q7023 2SD601-RS
Q3001 2SB709
Q3002 2SC2295
Q3906 2SB1320
QR3903 UN2213
D3901 MA165TA5VT
SW7001 ESD142129
TEST ON OFF
TO POWER P1102 (Page:3-6 / D-5)
S : TO SYSTEM CONTROL & SERVO SECTION (Page:3-11 / D-1) (Page:3-13 / D-10, B-10)
D : TO SUB MAIN (Page:3-15 / A-6)
T : TO TIMER MAIN (Page:3-17 / D-1, C-1) (Page:3-19 / A-10)
DEMODU.U
RF CONV
1 2 3 4 5 6 7 8 9 10

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (SP MODE)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (SP MODE)

MAIN C.B.A.

Transistor

Q2502	F-13
Q2503	G-11
Q2504	G-12
Q2505	G-10
Q2506	G-12
Q3001	B-16
Q3002	C-13
Q3906	B-11
Q4001	F-15
Q4002	G-14
Q4003	E-13
Q4004	F-13
Q7020	B-15
Q7021	A-15
Q7022	A-15
Q7023	A-15

Transistor & Resistor

QR1001	A-10
QR2001	D-0
QR3001	B-13
QR3002	A-11
QR3903	A-10
QR4002	D-15
QR4003	D-15
QR4004	E-13
QR6501	E-12
QR7501	A-9

Integrated Circuit

IC2501	F-9
IC2502	F-11
IC2503	F-10
IC3901	C-15
IC4001	G-14
IC6001	C-12
IC6501	F-12
IC7501	B-8
IC7502	E-9
IC7503	B-10
IC7504	E-9

Test Land / Test Point

TL17	B-15
TL18	D-15
TL20	B-11
TL21	B-11
TL23	B-13
TL25	B-14
TL26	B-15
TL31	C-16
TL1001	B-15
TL1002	C-10
TL2002	D-11
TL2003	D-11
TL2004	C-11
TL2009	C-13
TL2015	D-11
TL2026	D-11
TL2501	E-12
TL3002	C-16
TL4001	E-15
TL4002	E-16
TL4003	E-16
TL4004	F-14
TL4012	E-16
TL6001	D-12
TL6004	C-13
TL6501	E-13
TL7001	A-12
TL7010	C-15
TL7501	A-9
TL7505	C-7
TL7506	A-8
TL7507	C-9
TL7509	C-9
TL7510	A-12
TL7511	A-7
TL7514	C-8
TL7515	C-7
TLGND1	B-10
TLGND3	F-17
TLGND4	B-16
TLSERV	D-14
TP2001	C-14
TP3001	B-13
TPGND2	D-14

Adjustment

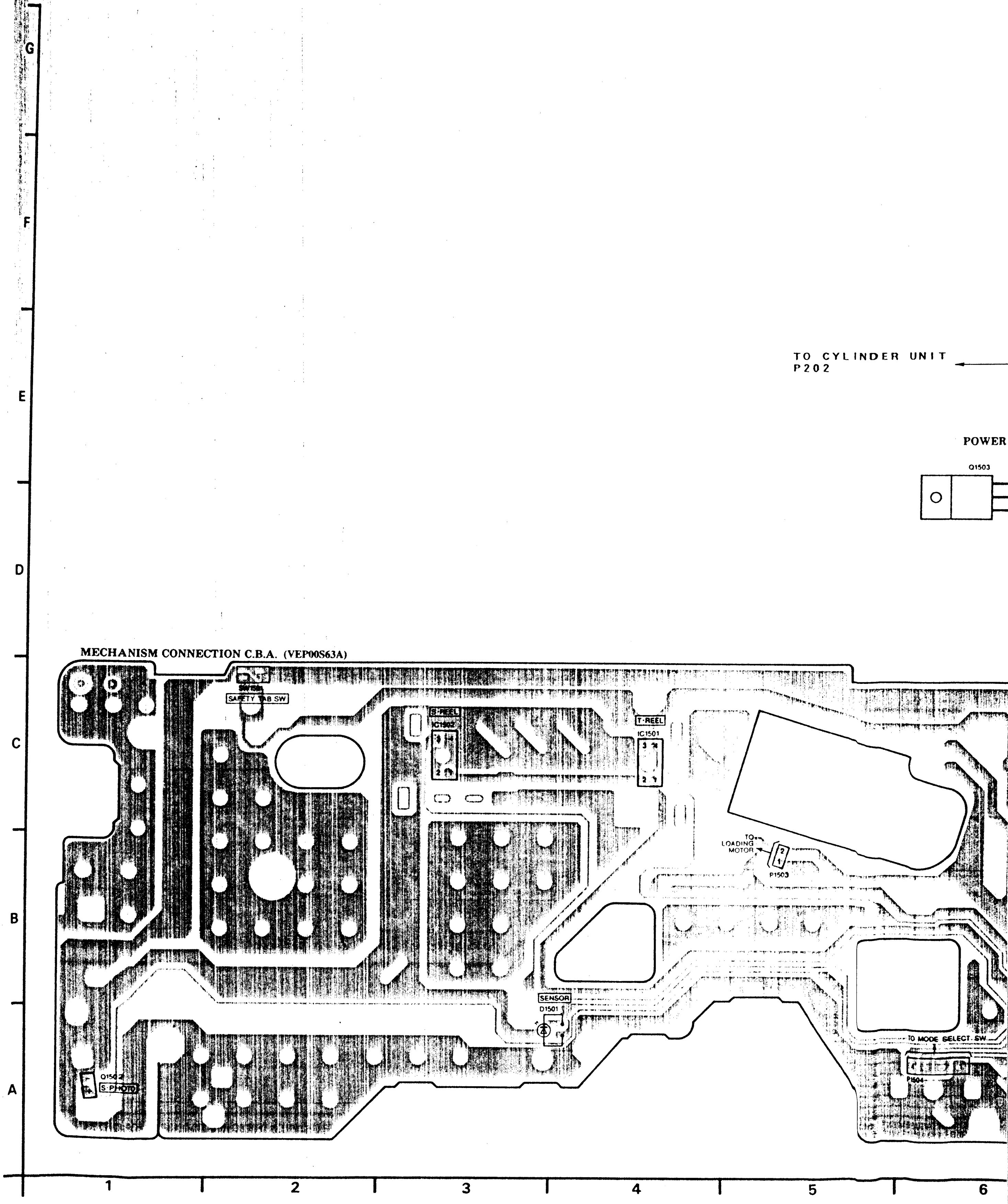
VR2001	C-11
VR3012	C-14
T4001	F-15
C7501	D-9

Connector

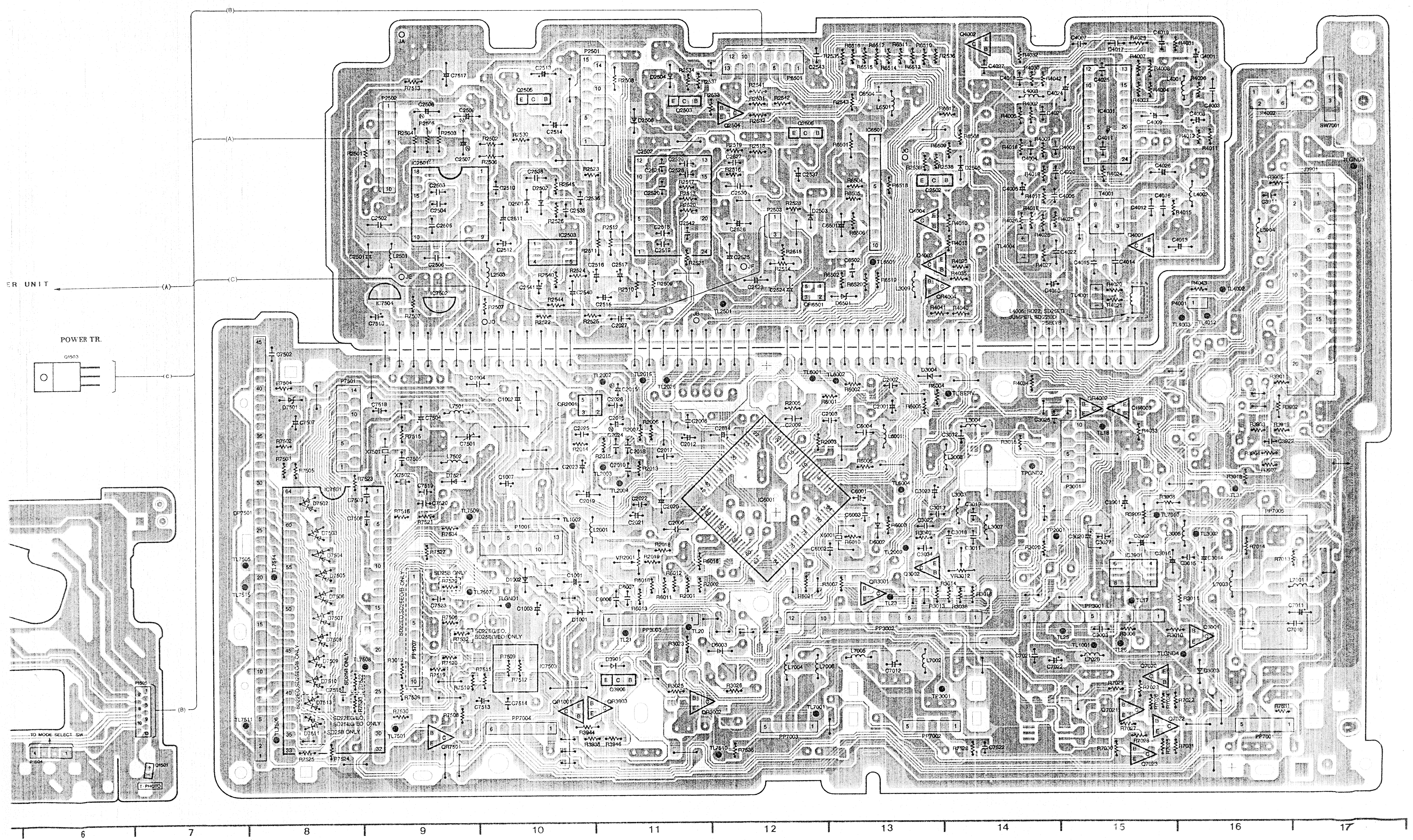
P1001	C-10
P2501	G-10
P2502	G-9
P2503	F-12
P3001	D-15
P4001	E-16
P4002	G-16
P501	G-12
P7501	D-8
PP3001	B-15
PP3002	B-13
PP3003	B-11
PP6707	B-9
PP7001	A-16
PP7002	A-13
PP7003	A-12
PP7004	A-10
PP7005	C-16
DP7501	C-8

ADDRESS INFORMATION

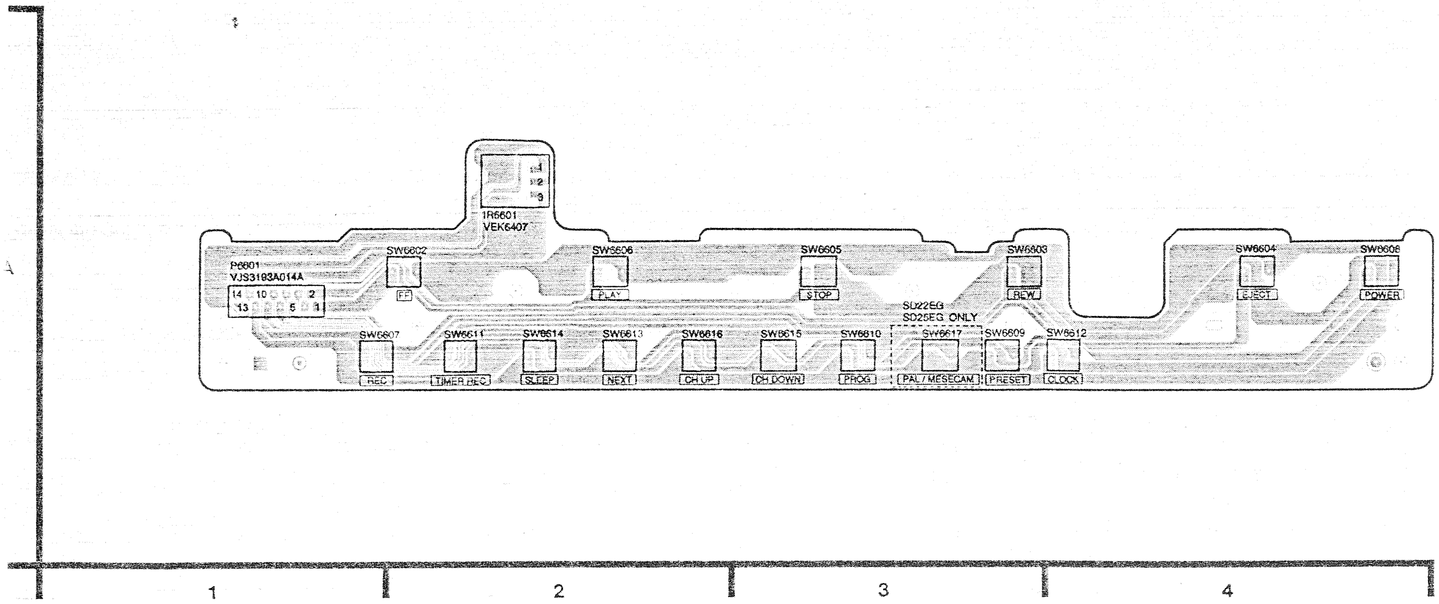
3-8.MAIN C.B.A.(VEP06954A : NV-SD22EG, SD25EG) (VEP06954B : NV-SD25B) (VE


G
F
E
D
C
B
A
1
2
3
4
5
6
TO CYLINDER UNIT P202
POWER
Q1503
MECHANISM CONNECTION C.B.A. (VEP00S63A)
SW1501
SAFETY TAB SW
S-REEL
IC1502
T-REEL
IC1501
TO LOADING MOTOR
P1503
SENSOR
D1501
Q1502
S-PHOTO
TO MODE SELECT SW
P1504

25B) (VEP06954C : NV-SD22EO, SD25EO)


ER UNIT
(A)
(B)
(C)
POWER TR.
Q1503
TO MODE SELECT SW
P1504
P1505
Q1501
T-PHOTO
IC2501
IC2502
IC2503
IC6501
IC4001
IC6001
IC7501
IC7503
IC3901
T4001
P2501
P6501
P3001
P4001
P4002
SW7001
J3901
PP7501
PP7004
PP7003
PP7002
PP7005
PP3001
PP3002
PP3003
P1001
DP7501
X6001
X7501
X7502
TPGND2
TLGND1
TLGND3
TLGND4
TL SERV
SD22EO, SD25EO/EB ONLY
SD25B ONLY
SD22EG/EO, SD25EO/EO ONLY
L4006: SD22, SD25EG JUMPER: SD22EO, SD25EO
6
7
8
9
10
11
12
13
14
15
16
17

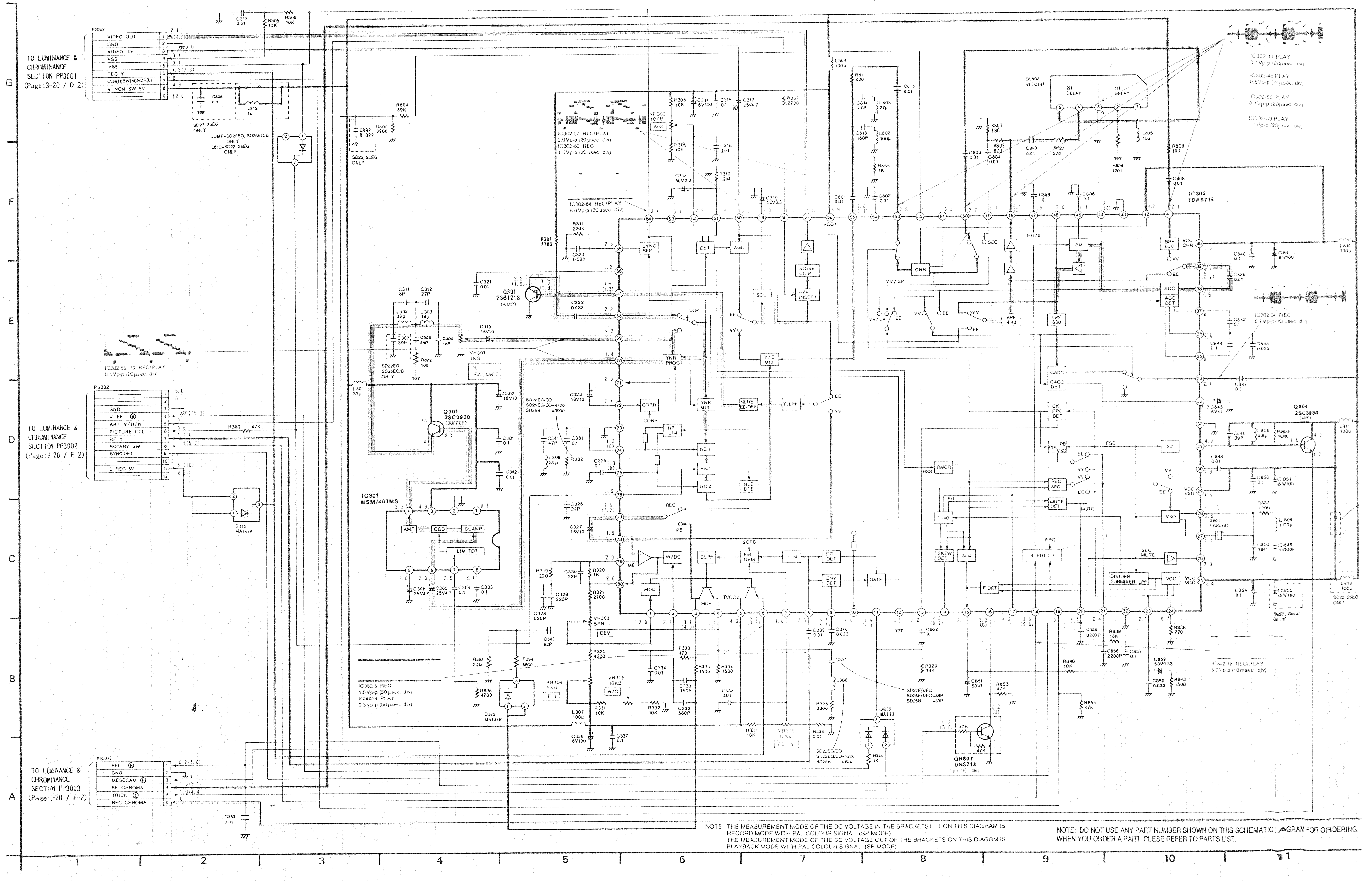
3-9.OPERATION C.B.A.(VEP07761A : NV-SD22EG, SD25EG)
(VEP07761B : NV-SD22EO, SD25EO/B)


1R6601
VEK6407
1
2
3
P6601
VJS3193A014A
14
10
2
13
5
1
SW6602
FF
SW6606
PLAY
SW6605
STOP
SW6603
REW
SW6604
EJECT
SW6608
POWER
SD22EG
SD25EG ONLY
SW6607
REC
SW6611
TIMER REC
SW6614
SLEEP
SW6613
NEXT
SW6616
CH UP
SW6615
CH DOWN
SW6610
PROG
SW6617
PAL / MESECAM
SW6609
PRESET
SW6612
CLOCK
1
2
3
4

3-10.LUMINANCE & CHROMINANCE PACK SCHEMATIC DIAGRAM

MAIN SIGNAL PATH IN REC MODE

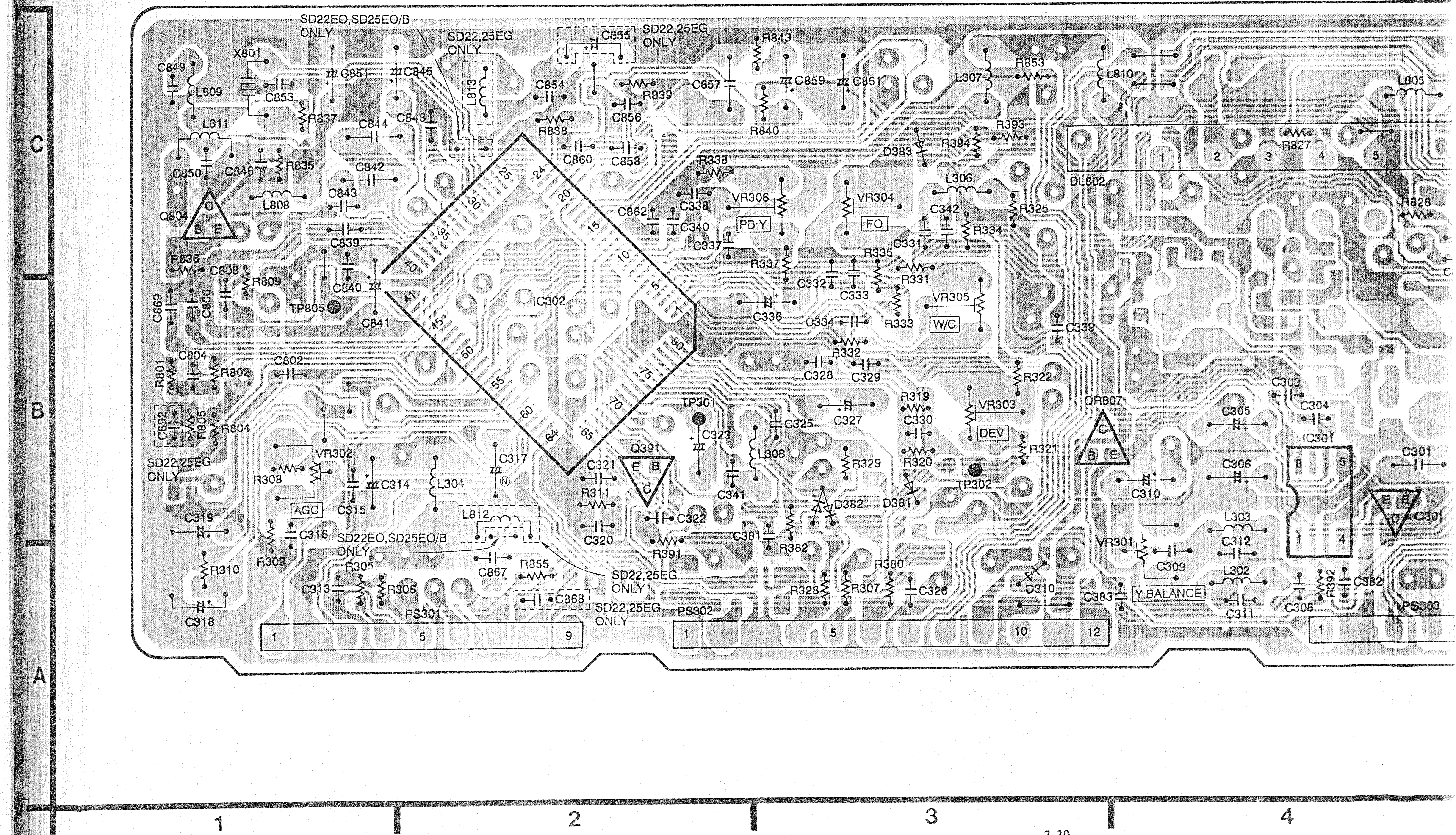
MAIN SIGNAL PATH IN PLAYBACK M

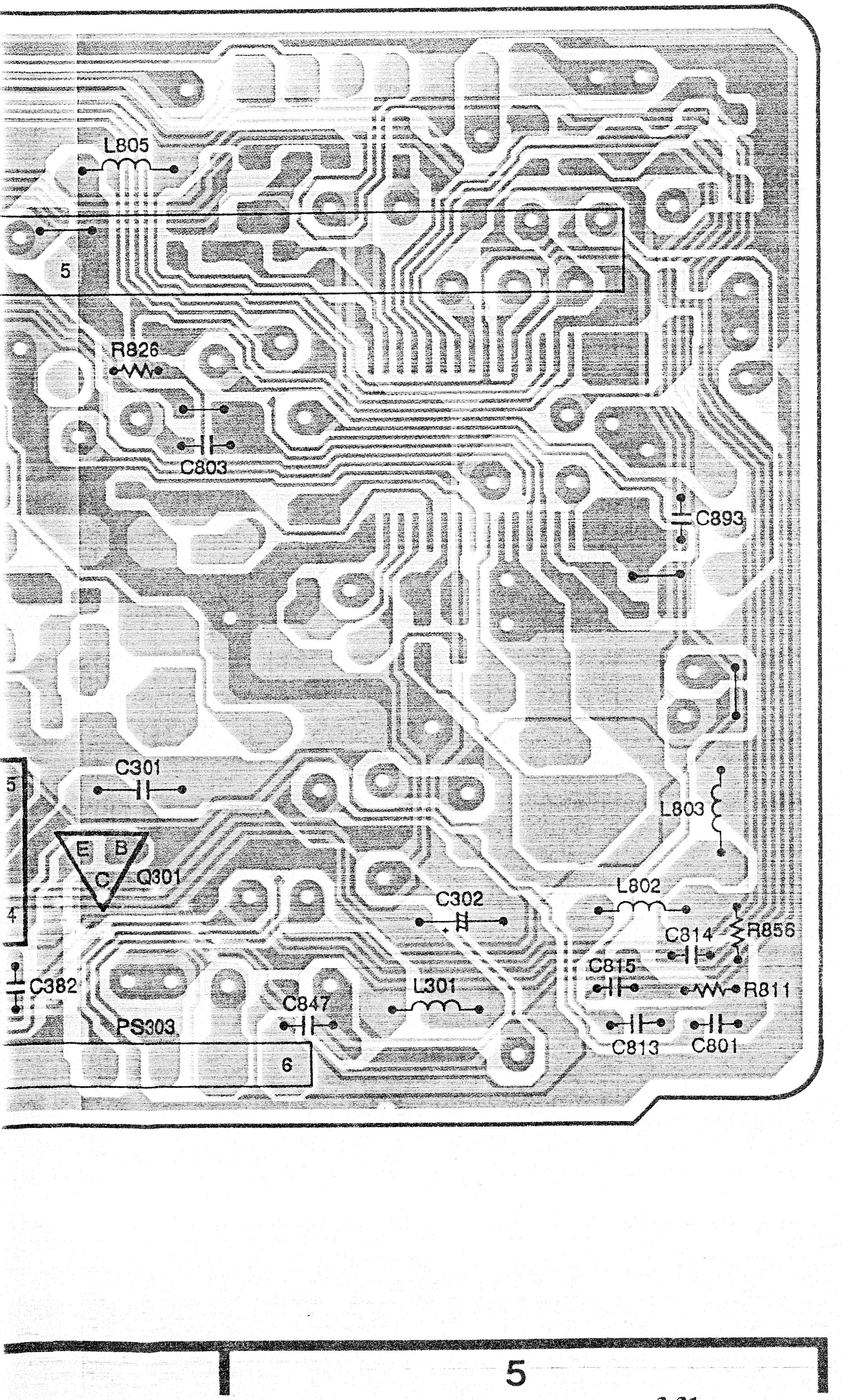

PS301
VIDEO OUT
GND
VIDEO IN
VSS
HSS
REC Y
CLR(H)BW(M)NOR(L)
V NON SW 5V
TO LUMINANCE & CHROMINANCE SECTION PP3001 (Page:3-20 / D-2)
PS302
GND
V EE
ART V/H/N
PICTURE CTL
RF Y
ROTARY SW
SYNC DET
E REC 5V
TO LUMINANCE & CHROMINANCE SECTION PP3002 (Page:3-20 / E-2)
PS303
REC
GND
MESECAM
RF CHROMA
TRICK
REC CHROMA
TO LUMINANCE & CHROMINANCE SECTION PP3003 (Page:3-20 / F-2)
SD22, 25EG ONLY
JUMP=SD22EO, SD25EO/B ONLY
L812=SD22, 25EG ONLY
IC302-57 REC/PLAY 2.0Vp-p (20μsec. div)
IC302-60 REC 1.0Vp-p (20μsec. div)
IC302-64 REC/PLAY 5.0Vp-p (20μsec. div)
IC302-69, 70 REC/PLAY 0.4Vp-p (20μsec. div)
IC302-6 REC 1.0Vp-p (50μsec. div)
IC302-8 PLAY 0.3Vp-p (50μsec. div)
IC302-41 PLAY 0.1Vp-p (20μsec. div)
IC302-46 PLAY 0.8Vp-p (20μsec. div)
IC302-50 PLAY 0.1Vp-p (20μsec. div)
IC302-53 PLAY 0.1Vp-p (20μsec. div)
IC302-34 REC 0.7Vp-p (20μsec. div)
IC302-18 REC/PLAY 5.0Vp-p (10msec. div)
Q391 2SB1218 (AMP)
Q301 2SC3930 (BUFFER)
IC301 MSM7403MS
AMP
CCD
CLAMP
LIMITER
VR301 1KB Y BALANCE
IC302 TDA9715
DL802 VLD0147
2H DELAY
1H DELAY
SYNC SEP
DET
AGC
SCL
NOISE CLIP
H/V INSERT
CNR
BM
BPF 4.43
LPF 630
BPF 630
ACC
ACC DET
GACC
GACC DET
CK FPC DET
YNR PROG
YNR MIX
Y/C MIX
NLDE EE.OFF
Y.LPF
CORR
HP LIM
NC 1
PICT
NC 2
NLE DTE
W/DC
DLPF
FM DEM
LIM
DO DET
ENV DET
GATE
MOD
MDE
TVDC2
DEV
F.O
W/C
TIMER
REC AFC
MUTE DET
1:40
SKEW DET
SLO
4 PHI : 4
F.DET
SEC MUTE
DIVIDER SUBMIXER LPF
VCO
VXO
X2
FSC
FPC
Q804 2SC3930
QR807 UNS213
D310 MA141K
D383 MA141K
D832 MA143
X801 VSX0162
VR302 10KB AGC
VR303 5KB
VR304 5KB
VR305 10KB
SD22EG/EO SD25EG/EO=4700 SD25B =3900
SD22EG/EO SD25EG/EO=56P SD25B =33P
SD22EG/EO SD25EG/EO=1200 SD25B =82Ω
SD22EO SD25EO/B ONLY
SD22, 25EG ONLY
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL (SP MODE).
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL (SP MODE).

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.
WHEN YOU ORDER A PART, PLESE REFER TO PARTS LIST.

3-11.LUMINANCE & CHROMINANCE PACK C.B.A. (VEP03A59K

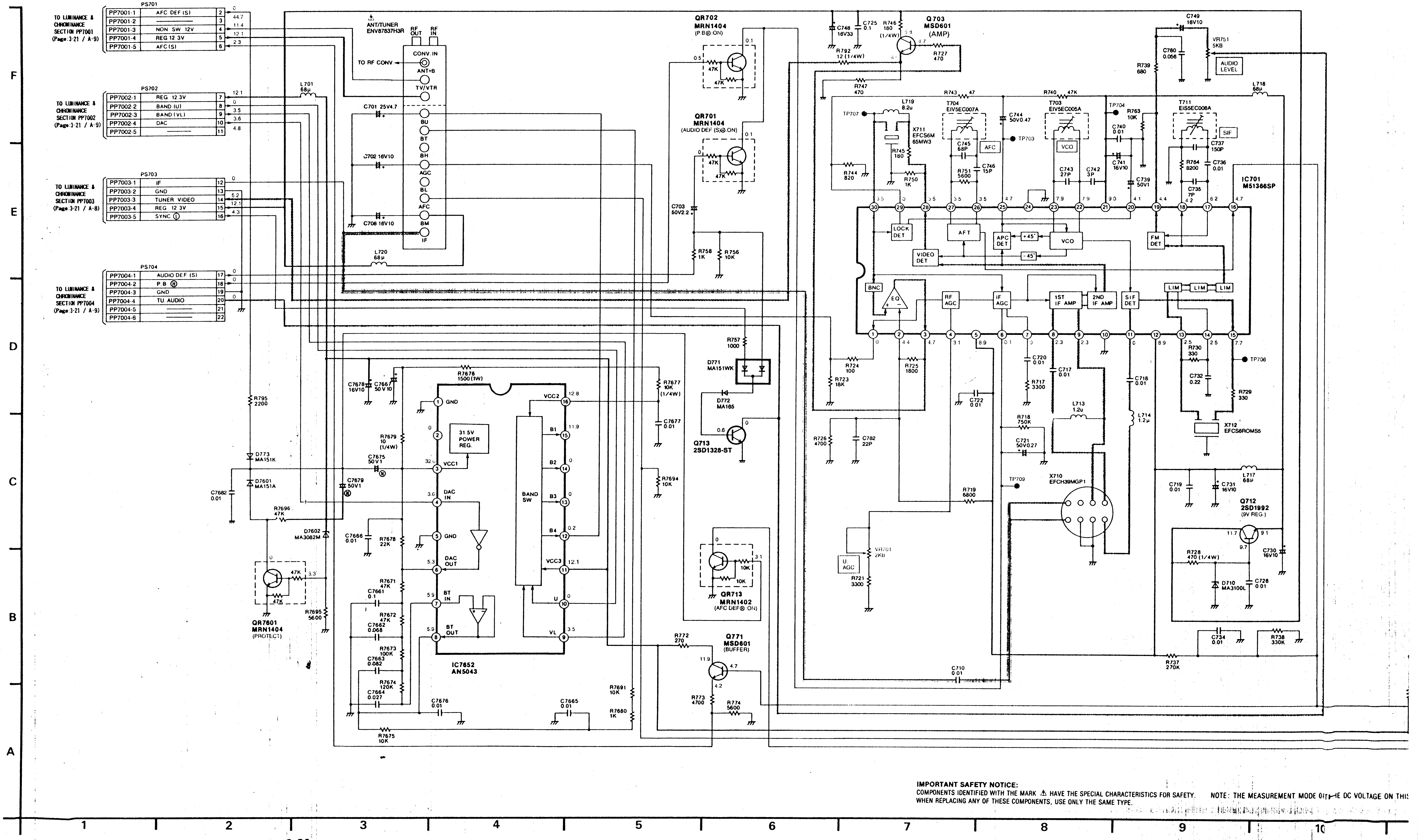

SD22EO,SD25EO/B ONLY
SD22,25EG ONLY
C855
SD22,25EG ONLY
X801
C849
C851
C845
L813
L809
C853
R837
C844
C848
C854
R839
C857
R843
C859
C861
L307
R853
L810
L805
L811
R838
C856
R840
R393
C850
C846
R835
C860
C858
D383
R394
R827
C842
R338
DL802
1
2
3
4
5
C843
L808
VR306
VR304
L306
R325
R826
Q804
C
B
E
C862
C338
PB Y
FO
C342
R334
C340
C839
C337
C331
R836
C808
R809
R337
R335
C840
C332
R331
C869
C806
TP805
IC302
C336
C333
VR305
C841
C334
R333
W/C
C339
C804
C802
R332
R801
R802
C328
C329
R322
C303
C892
R805
R804
TP301
R319
VR303
QR807
C305
C304
C327
C330
DEV
C325
C323
IC301
SD22,25EG ONLY
VR302
C317
Q391
R320
R321
C301
C321
R329
C306
L308
R308
C314
L304
TP302
C310
C315
R311
C341
D382
D381
E
B
C
AGC
L812
C322
R382
VR301
L303
C319
C316
C312
C320
C381
SD22EO,SD25EO/B ONLY
R391
C309
R309
R305
C867
R855
R380
L302
R310
C313
R306
SD22,25EG ONLY
R328
R307
C326
D310
C383
Y.BALANCE
R392
C382
C868
C308
C311
C318
PS301
SD22,25EG ONLY
PS302
PS303
1
5
9
1
5
10
12
1
10
15
20
24
25
30
35
40
41
45
50
55
60
64
65
70
75
80
8
5
1
4
C
B
A
1
2
3
4


L805
5
R826
C803
C893
C301
5
E
B
C
Q301
4
C382
PS303
C847
L301
C302
L803
L802
C814
R856
C815
R811
C813
C801
6
5

LUMINANCE & CHROMINANCE PACK C. B. A	
Transistor	
Q391 Q804	B-2 C-1
Transistor & Resistor	
QR807	B-3
Integrated Circuit	
IC301 IC302	B-4 B-2
Test Point	
TP301 TP302 TP805	B-2 B-3 B-1
Adjustment	
VR301 VR302 VR303 VR304 VR306	A-4 B-1 B-3 C-3 C-3
Connector	
PS301 PS302 PS303	A-2 A-2 A-4

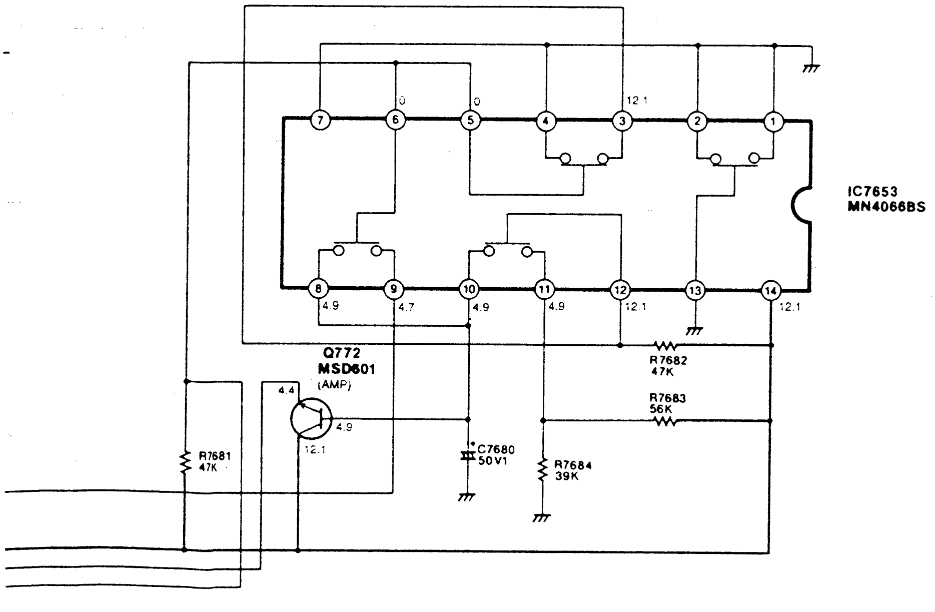
ADDRESS INFORMATION

3-12.TV DEMODULATOR PACK SCHEMATIC DIAGRAM (NV-SD25B ONLY)


VIDEO SIGNAL PATH
AUDIO SIGNAL PATH
PS701
TO LUMINANCE & CHROMINANCE SECTION PP7001 (Page 3-21 / A-9)
PP7001-1 AFC DEF (S)
PP7001-2
PP7001-3 NON SW 12V
PP7001-4 REG 12 3V
PP7001-5 AFC (S)
PS702
TO LUMINANCE & CHROMINANCE SECTION PP7002 (Page 3-21 / A-9)
PP7002-1 REG 12.3V
PP7002-2 BAND (U)
PP7002-3 BAND (VL)
PP7002-4 DAC
PP7002-5
PS703
TO LUMINANCE & CHROMINANCE SECTION PP7003 (Page 3-21 / A-8)
PP7003-1 IF
PP7003-2 GND
PP7003-3 TUNER VIDEO
PP7003-4 REG 12 3V
PP7003-5 SYNC ①
PS704
TO LUMINANCE & CHROMINANCE SECTION PP7004 (Page 3-21 / A-9)
PP7004-1 AUDIO DEF (S)
PP7004-2 P.B Ⓗ
PP7004-3 GND
PP7004-4 TU. AUDIO
PP7004-5
PP7004-6
ANT/TUNER ENV87837H3R
RF OUT
RF IN
TO RF CONV
CONV.IN
ANT+B
TV/VTR
BU
BT
BH
AGC
BL
AFC
BM
IF
L701 68μ
C701 25V4.7
C702 16V10
C708 16V10
L720 68μ
QR702 MRN1404 (P.B Ⓗ ON)
QR701 MRN1404 (AUDIO DEF (S) Ⓗ ON)
C703 50V2.2
R758 1K
R756 10K
R757 1000
D771 MA151WK
D772 MA165
Q713 2SD1328-ST
QR713 MRN1402 (AFC DEF Ⓗ ON)
Q771 MSD601 (BUFFER)
R772 270
R773 4700
R774 5600
C748 16V33
C725 0.1
R746 180 (1/4W)
R792 12 (1/4W)
Q703 MSD601 (AMP)
R727 470
R747 470
R743 47
R740 47K
L719 8.2μ
X711 EFCS6M 65MW3
R745 180
R744 820
R750 1K
T704 EIV5EC007A
C745 68P
C746 15P
R751 5600
AFC
C744 50V0.47
TP703
TP707
T703 EIV5EC005A
VCO
C743 27P
C742 3P
TP704
R763 10K
C740 0.01
C741 16V10
C739 50V1
T711 EIS5EC008A
SIF
C737 150P
R764 8200
C736 0.01
C735 7P
C749 16V10
C760 0.056
VR751 5KB
AUDIO LEVEL
R739 680
L718 68μ
IC701 M51366SP
LOCK DET
AFT
APC DET
+45°
-45°
VCO
VIDEO DET
FM DET
BNC
EQ
RF AGC
IF AGC
1ST IF AMP
2ND IF AMP
SIF DET
LIM
R724 100
R723 18K
R725 1800
C720 0.01
R717 3300
C717 0.01
C722 0.01
C718 0.01
R730 330
C732 0.22
R729 330
TP706
L713 1.2μ
L714 1.2μ
R718 750K
C721 50V0.27
X712 EFCS6ROMS5
R726 4700
C782 22P
X710 EFCH39MGP1
TP709
R719 6800
VR701 2KB
U. AGC
R721 3300
C719 0.01
C731 16V10
L717 68μ
Q712 2SD1992 (9V REG.)
R728 470 (1/4W)
C730 16V10
D710 MA3100L
C728 0.01
C734 0.01
R738 330K
R737 270K
C710 0.01
PS7676 1500 (1W)
R7676 1500 (1W)
C7678 16V10
C7667 50V10
R7677 10K (1/4W)
C7677 0.01
R795 2200
D773 MA151K
D7601 MA151A
C7682 0.01
R7696 47K
D7602 MA3082M
QR7601 MRN1404 (PROTECT)
R7695 5600
R7679 10 (1/4W)
C7675 50V1
C7679 50V1
31.5V POWER REG.
GND
VCC1
DAC IN
DAC OUT
BT IN
BT OUT
VCC2
B1
B2
B3
B4
VCC3
U
VL
BAND SW
IC7652 AN5043
C7666 0.01
R7678 22K
R7671 47K
C7661 0.1
R7672 47K
C7662 0.068
R7673 100K
C7663 0.082
R7674 120K
C7664 0.027
C7676 0.01
R7675 10K
C7665 0.01
R7691 10K
R7680 1K
R7694 10K
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS


IC7653
MN4066BS
Q772
MSD601
(AMP)
R7681
47K
R7682
47K
R7683
56K
R7684
39K
C7680
50V1
0
0
12.1
4.9
4.7
4.9
4.9
12.1
12.1
4.4
4.9
12.1

THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

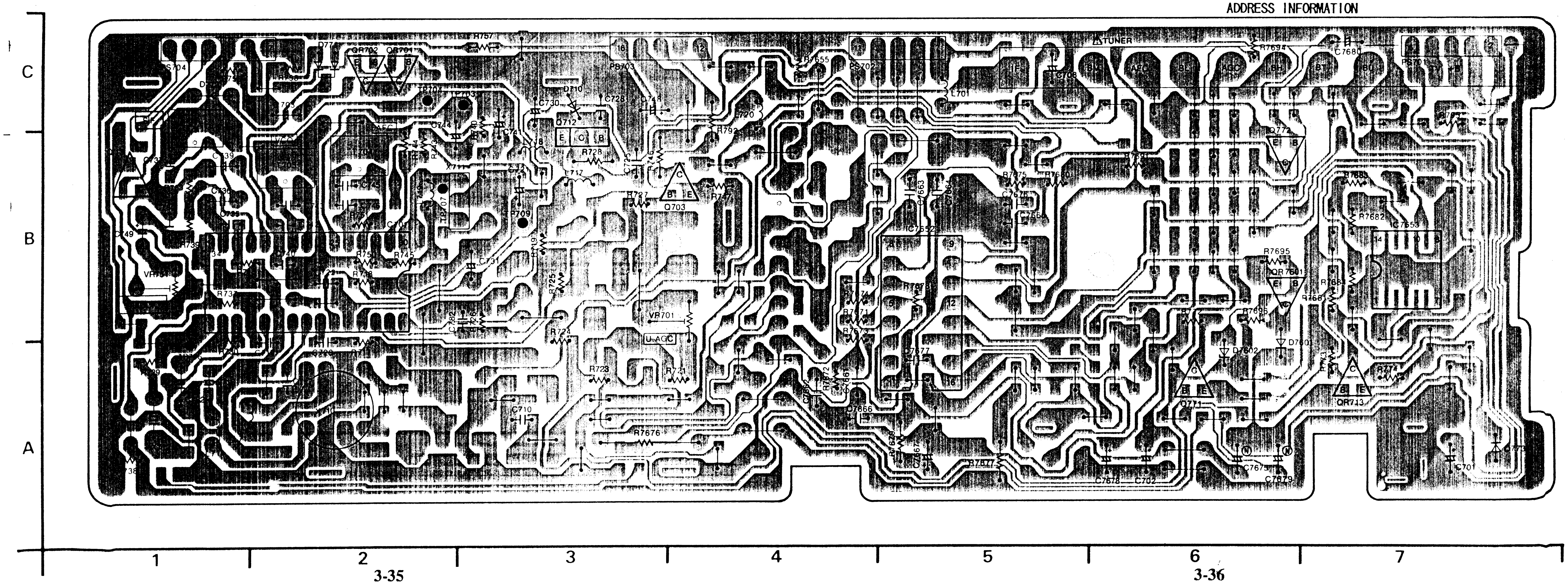
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

11 12 13

3-13.TV DEMODULATOR PACK C.B.A. (VEP07645AA

TV DEMODULATER PACK C. B. A.			
Transistor		Test Point	
Q703	B-4	TP703	C-3
Q712	B-3	TP704	C-2
Q713	B-1	TP706	A-1
Q771	A-6	TP707	B-2
Q772	B-6	TP709	B-3
Transistor & Resistor		Adjustment	
QR701	C-2	VR701	B-3
QR702	C-2	VR751	B-1
QR713	A-7	T703	B-2
QR7601	B-6	T704	B-2
		T711	C-1
Integrated Circuit		Connection	
IC701	B-2	PS701	C-7
IC7652	B-5	PS702	C-5
IC7653	B-7	PS703	C-3
		PS704	C-1

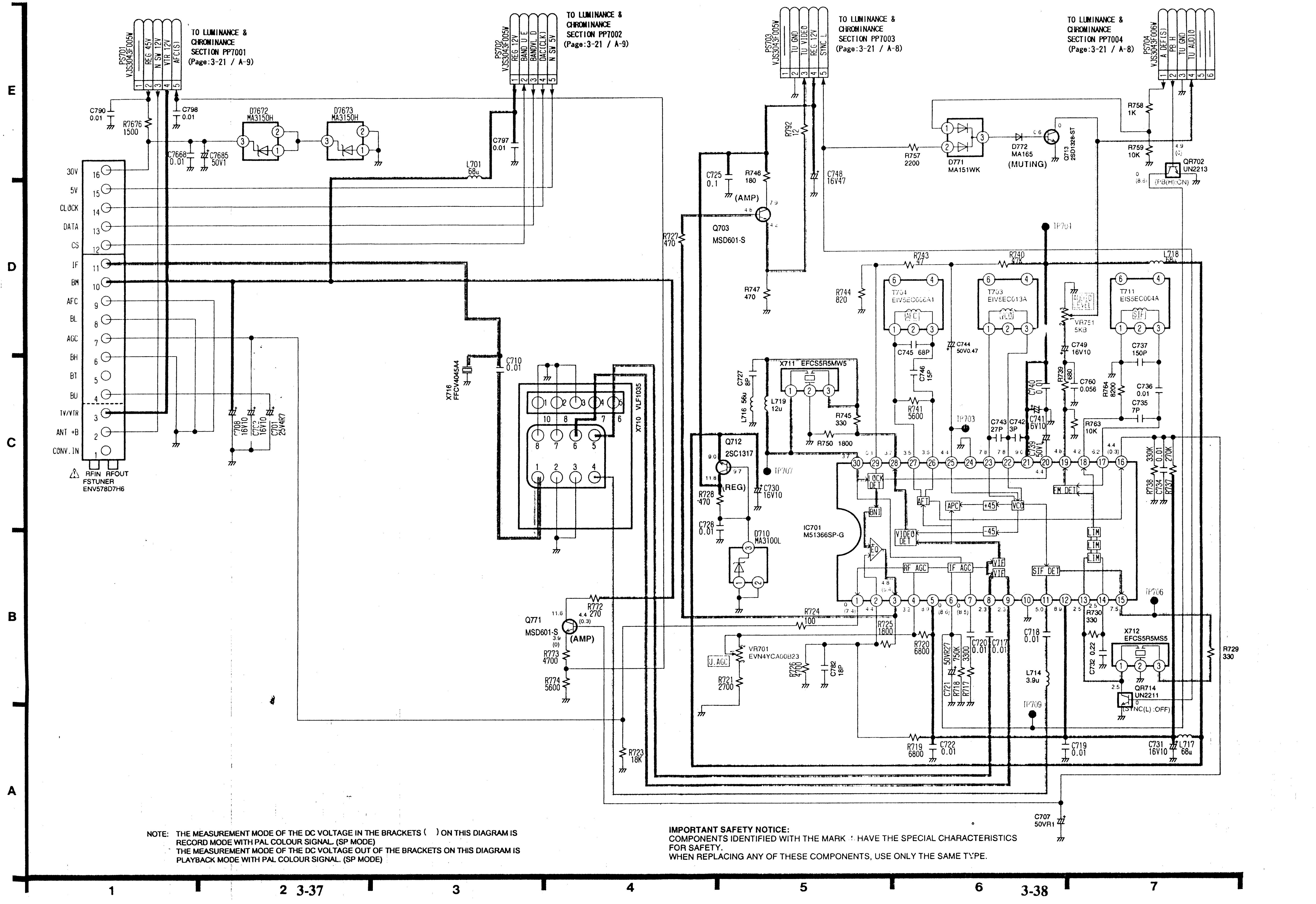
ADDRESS INFORMATION


C
B
A
1
2
3
4
5
6
7
PS704
QR702
QR701
TP707
TP703
Q712
D710
C730
C728
R728
L717
Q703
R727
R747
PS703
VR701
U-AGC
R723
R721
C710
R7676
PS702
R7655
L701
TUNER
R7694
C7680
PS701
Q772
R7675
R7680
C7676
IC7652
IC7653
R7682
R7695
QR7601
R7696
D7602
D7601
Q771
QR713
C7675
C7679
C7678
C702
C701
R757
R709
R745
VR751
R737
C7663
C7664
C7666
R7672
R7677

3-14.TV DEMODULATOR PACK SCHEMATIC DIAGRAM (NV-SD22EG/EO, SD25EG/EO ONLY)

------ VIDEO SIGNAL PATH

------ AUDIO SIGNAL PATH


E
D
C
B
A
1
2
3
4
5
6
7
PS7701
VJS3043F005W
REG 45V
N SW 12V
VTR 12V
AFC(S)
TO LUMINANCE & CHROMINANCE SECTION PP7001 (Page:3-21 / A-9)
PS7702
VJS3043F005W
REG 12V
BAND U E
BAND VL D
DAC(CLK)
N SW 5V
TO LUMINANCE & CHROMINANCE SECTION PP7002 (Page:3-21 / A-9)
PS7703
VJS3043F005W
TU GND
TU VIDEO
REG 12V
SYNC L
TO LUMINANCE & CHROMINANCE SECTION PP7003 (Page:3-21 / A-8)
TO LUMINANCE & CHROMINANCE SECTION PP7004 (Page:3-21 / A-8)
PS7704
VJS3043F006W
A DET(S)
PB H
TU GND
TU AUDIO
C790 0.01
R7676 1500
C798 0.01
D7672 MA3150H
D7673 MA3150H
C7668 0.01
C7685 50V1
C797 0.01
L701 68u
30V
5V
CLOCK
DATA
CS
IF
BM
AFC
BL
AGC
BH
BT
BU
TV/VTR
ANT +B
CONV.IN
RFIN RFOUT
FSTUNER
ENV578D7H6
C708 16V10
C702 16V10
C701 25V4R7
X716 FFCV4045A4
C710 0.01
X710 VLF1035
Q771 MSD601-S
(AMP)
R772 270
R773 4700
R774 5600
R723 18K
C725 0.1
R746 180
(AMP)
Q703 MSD601-S
R792 12
C748 16V47
R727 470
R747 470
R757 2200
D771 MA151WK
D772 MA165
(MUTING)
Q713 2SD1328-ST
R758 1K
R759 10K
QR702 UN2213
(PB(H):ON)
TP701
R743 47
R740 47K
L718 68u
R744 820
T704 EIVSEC006A1
AFC
T703 EIVSEC013A
VCO
T711 EIS5EC004A
SIF
AUDIO LEVEL
VR751 5KB
C745 68P
C744 50V0.47
C746 15P
C749 16V10
C737 150P
C727 8P
X711 EFCS5R5MW5
L716 56u
L719 12u
R745 330
R750 1800
R741 5600
TP703
C743 27P
C742 3P
C740 0.01
C741 16V10
C739 50V1
R739 680
C760 0.056
R764 8200
C736 0.01
C735 7P
R763 10K
Q712 2SC1317
(REG)
TP707
C730 16V10
R728 470
C728 0.01
D710 MA3100L
IC701 M51366SP-G
LOCK DET
AFT
APC
+45
VCO
-45
FM DET
BNI
VIDEO DET
EQ
RF AGC
IF AGC
VIF
VIF
SIF DET
LIM
LIM
LIM
R738 330K
C734 0.01
R737 270K
TP706
R724 100
R725 1800
VR701 EVN4YCA00B23
J.AGC
R721 2700
R726 4700
C782 18P
R720 6800
C721 50V
R718 750K
R717 3300
C720 0.01
C717 0.01
C718 0.01
L714 3.9u
TP709
R730 330
C732 0.22
X712 EFCS5R5MS5
QR714 UN2211
(SYNC(L):OFF)
R729 330
R719 6800
C722 0.01
C719 0.01
C731 16V10
L717 68u
C707 50VR1

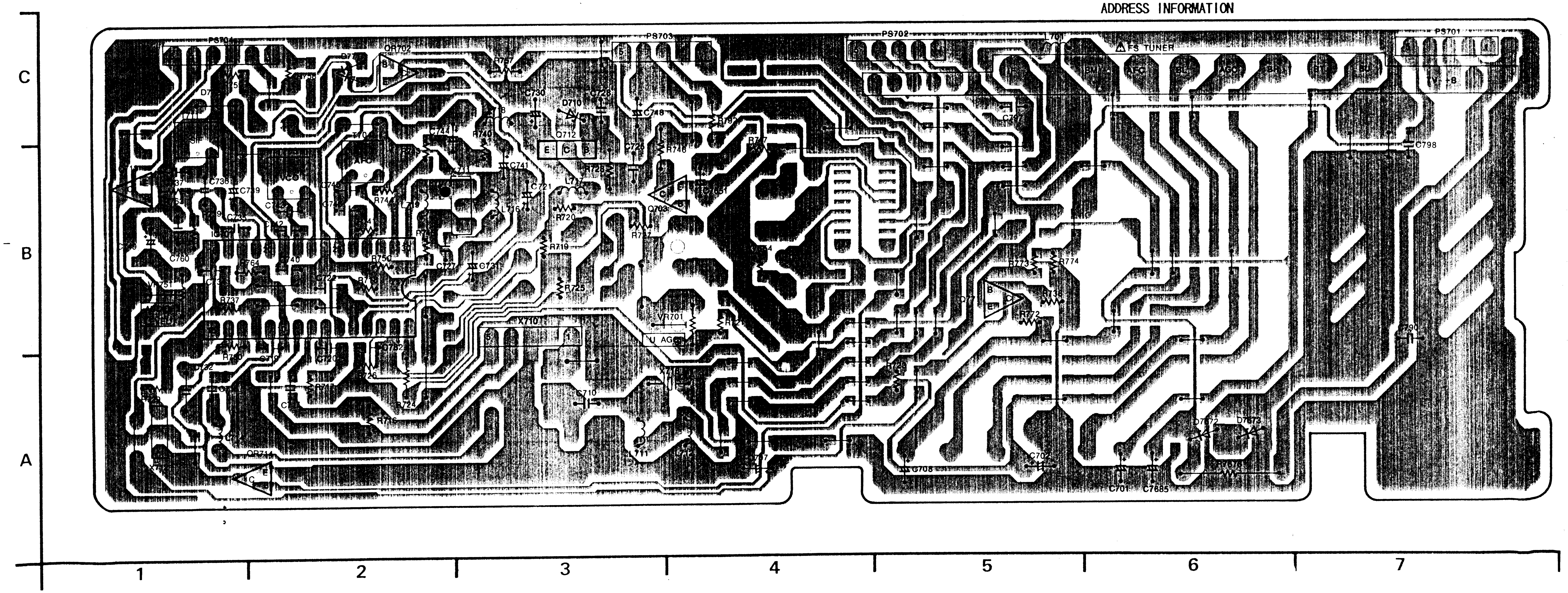
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (SP MODE)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (SP MODE)

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

3-15.TV DEMODULATOR PACK C.B.A. (VEP07749D : NV-SD22EG/EO, SD25EG/EO)

TV DEMODULATER C.B.A.			
Transistor		Adjustment	
Q703	B-3	VR701	B-4
Q712	B-3	VR751	B-1
Q713	B-1	T703	B-2
Q771	B-5	T704	B-2
Transistor & Resistor		T711	C-1
QR702	C-2	Connection	
QR714	A-2	PS701	C-7
Test Point		PS702	C-5
TP707	B-2	PS703	C-3
Integrated Circuit		PS704	C-1
IC701	B-2		

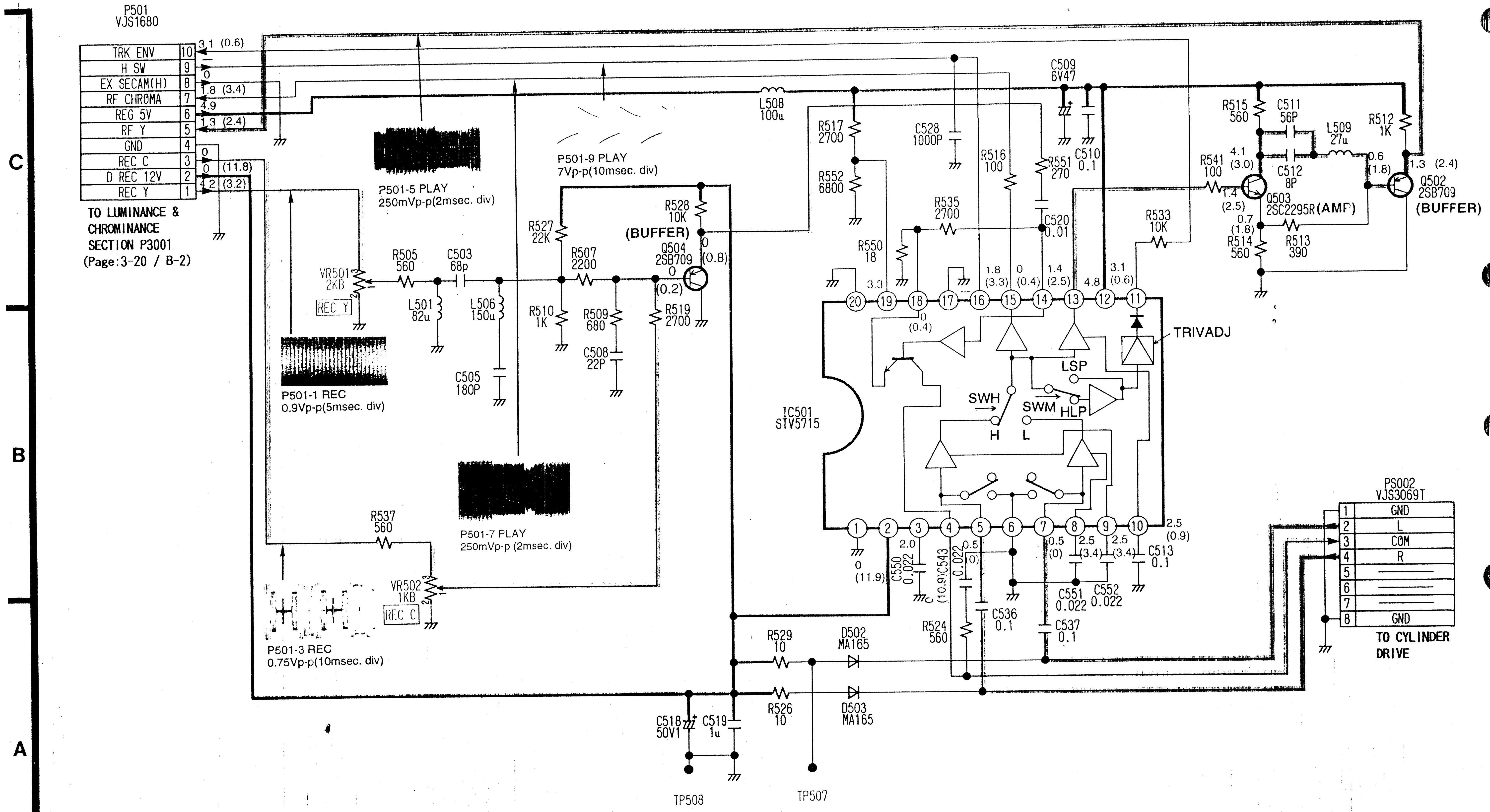
ADDRESS INFORMATION


C
B
A
1
2
3
4
5
6
7
PS704
PS703
PS702
PS701
FS TUNER
QR702
Q712
Q703
QR714
VR701
VR751
X710
AFC
VCO
C798
C701
C7685
C708
R774
R773
R772
R725
R720
R719
R724
R716
R746
R750
R737
C760
C710
C748
C741
C727

3-16.HEAD AMP SCHEMATIC DIAGRAM

——— VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE

- - - - VIDEO MAIN SIGNAL PATH IN REC MODE

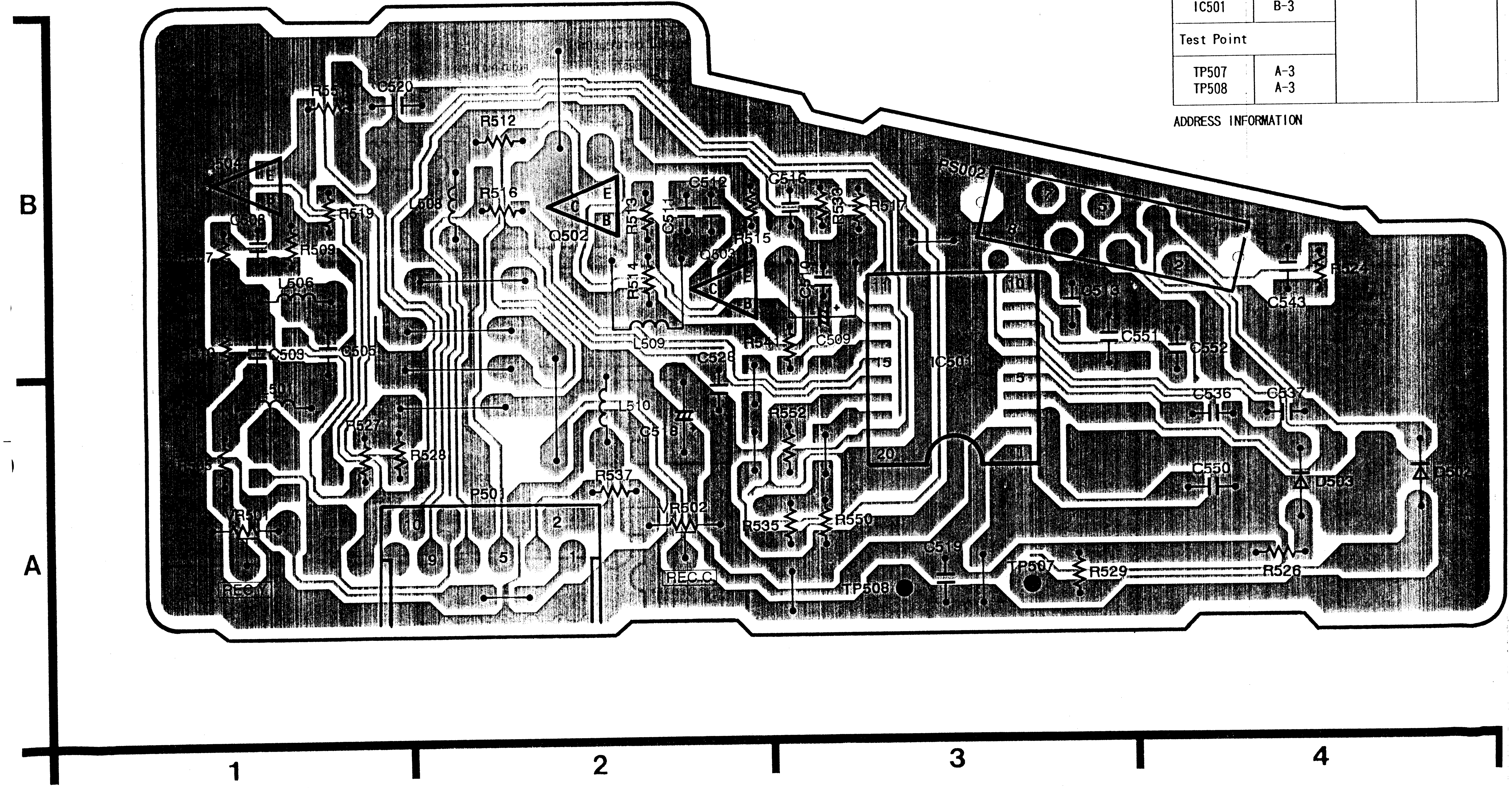

P501
VJS1680
TRK ENV 10
H SW 9
EX SECAM(H) 8
RF CHROMA 7
REG 5V 6
RF Y 5
GND 4
REC C 3
D REC 12V 2
REC Y 1
3.1 (0.6)
0
1.8 (3.4)
4.9
1.3 (2.4)
0
0 (11.8)
4.2 (3.2)
TO LUMINANCE &
CHROMINANCE
SECTION P3001
(Page:3-20 / B-2)
P501-5 PLAY
250mVp-p(2msec. div)
P501-9 PLAY
7Vp-p(10msec. div)
P501-1 REC
0.9Vp-p(5msec. div)
P501-7 PLAY
250mVp-p (2msec. div)
P501-3 REC
0.75Vp-p(10msec. div)
VR501
2KB
REC Y
R505
560
C503
68p
L501
82u
L506
150u
C505
180P
R527
22K
R507
2200
R510
1K
R509
680
C508
22P
R528
10K
(BUFFER)
Q504
2SB709
0
(0.8)
0
(0.2)
R519
2700
R537
560
VR502
1KB
REC C
L508
100u
R517
2700
R552
6800
R550
18
C528
1000P
R516
100
R535
2700
C509
6V47
C510
0.1
R551
270
C520
0.01
R533
10K
3.3
0
(0.4)
1.8
(3.3)
0
(0.4)
1.4
(2.5)
4.8
3.1
(0.6)
20 19 18 17 16 15 14 13 12 11
TRIVADJ
LSP
SWH
SWM
HLP
H
L
IC501
STV5715
1 2 3 4 5 6 7 8 9 10
2.5
(0.9)
0
(11.9)
2.0
C550
0.022
0
(10.9)
C543
0.022
0.5
(0)
0.5
(0)
2.5
(3.4)
2.5
(3.4)
C513
0.1
C551
0.022
C552
0.022
C536
0.1
C537
0.1
R524
560
R529
10
D502
MA165
R526
10
D503
MA165
C518
50V1
C519
1u
TP508
TP507
R515
560
C511
56P
L509
27u
R512
1K
R541
100
4.1
(3.0)
C512
8P
0.6
(1.8)
1.3 (2.4)
Q502
2SB709
(BUFFER)
1.4
(2.5)
Q503
2SC2295R(AMP)
0.7
(1.8)
R514
560
R513
390
PS002
VJS3069T
1 GND
2 L
3 COM
4 R
5
6
7
8 GND
TO CYLINDER
DRIVE
C
B
A
1
2
3
4
5

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (SP MODE)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (SP MODE)

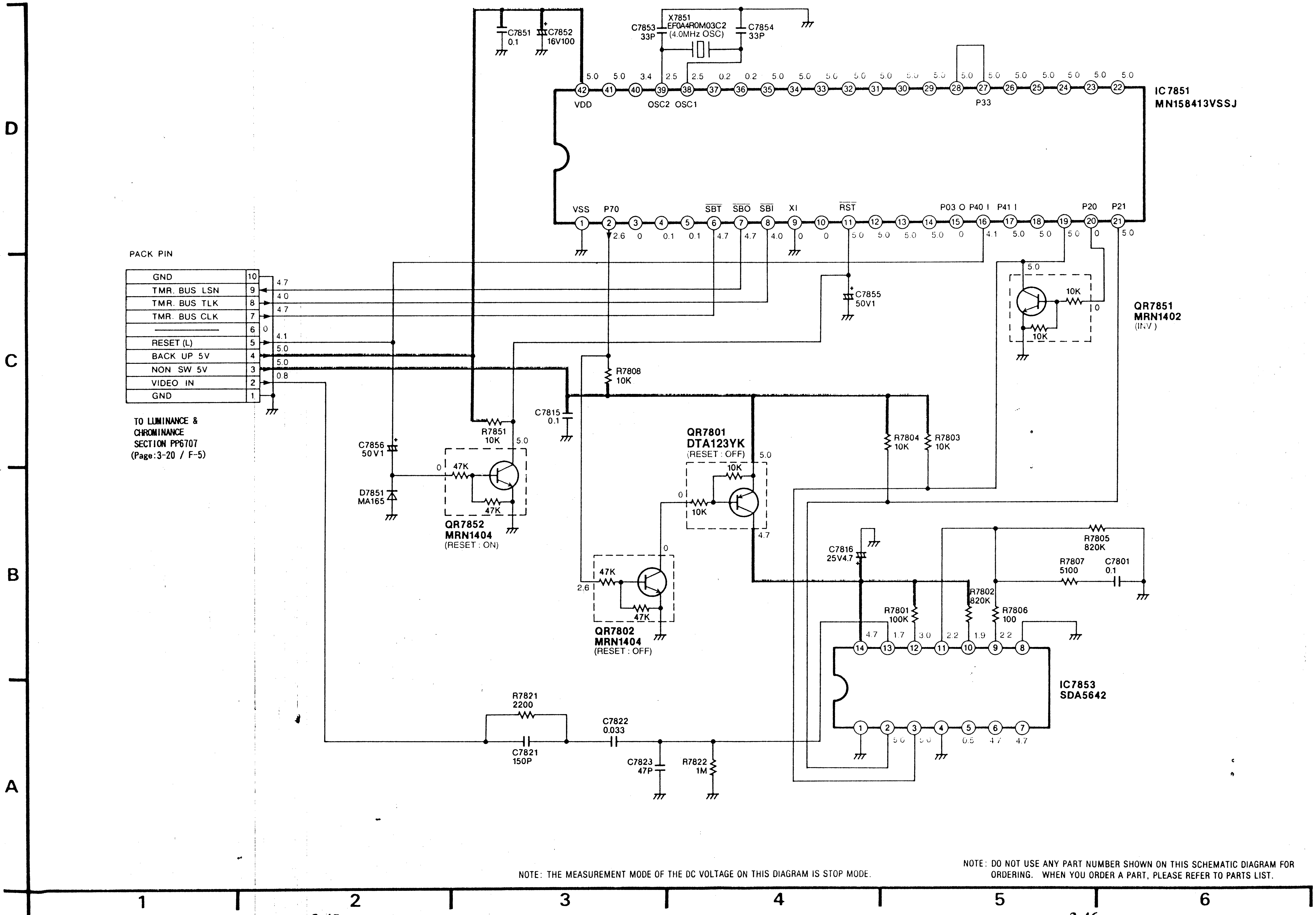
3-17.HEAD AMP C.B.A.(VEP05200A)

HEAD AMP C.B.A.			
Transistor		Adjustment	
Q502 Q503 Q504	B-1 B-2 B-2	VR502	A-2
		Connector	
Integrated Circuit		P501 PS002	A-2 B-3
IC501	B-3		
Test Point			
TP507 TP508	A-3 A-3		

ADDRESS INFORMATION


B
A
1
2
3
4
C520
R512
R516
L508
Q502
E
C
B
C512
C516
R513
C511
R539
R517
R515
Q503
R514
PS002
R519
C508
R509
L506
C503
C505
L509
C528
R541
C509
IC501
15
20
10
5
C551
C552
C543
C536
C537
L510
R552
R527
R528
C550
D503
D502
R537
P501
VR502
VR501
R535
R550
C519
TP507
R529
R526
TP508
REC.Y
REC.C
9
1

3-18.VPS PACK SCHEMATIC DIAGRAM (NV-SD22EG, SD25EG ONLY)


D
C
B
A
1
2
3
4
5
6
C7851
0.1
C7852
16V100
X7851
EF0A4R0M03C2
(4.0MHz OSC)
C7853
33P
C7854
33P
VDD
OSC2 OSC1
P33
IC7851
MN158413VSSJ
VSS
P70
SBT
SBO
SBI
XI
RST
P03 O
P40 I
P41 I
P20
P21
PACK PIN
GND
TMR. BUS LSN
TMR. BUS TLK
TMR. BUS CLK
RESET (L)
BACK UP 5V
NON SW 5V
VIDEO IN
GND
TO LUMINANCE &
CHROMINANCE
SECTION PP6707
(Page:3-20 / F-5)
C7855
50V1
QR7851
MRN1402
(INV)
10K
10K
R7808
10K
C7815
0.1
R7851
10K
C7856
50V1
47K
47K
D7851
MA165
QR7852
MRN1404
(RESET : ON)
QR7801
DTA123YK
(RESET : OFF)
10K
10K
R7804
10K
R7803
10K
47K
47K
QR7802
MRN1404
(RESET : OFF)
C7816
25V4.7
R7805
820K
R7807
5100
C7801
0.1
R7801
100K
R7802
820K
R7806
100
IC7853
SDA5642
R7821
2200
C7821
150P
C7822
0.033
C7823
47P
R7822
1M

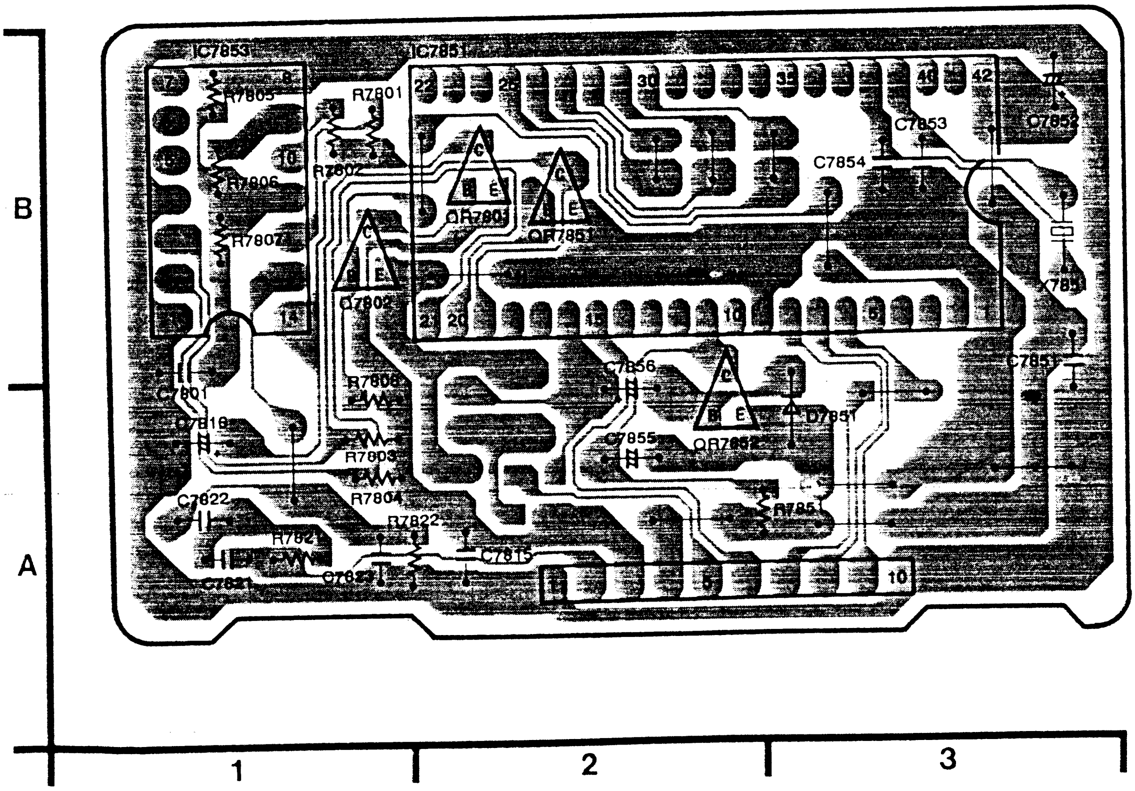
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

3-19.VPS PACK C.B.A. (VEP07575F : NV-SD22EG, SD25EG)

VPS PACK C. B. A.	
Transistor	
Q7802	B-1
Transistor & Resistor	
QR7801 QR7851 QR7852	B-2 B-2 A-2
Integrated Circuit	
IC7851 IC7853	B-2 B-1

ADDRESS INFORMATION

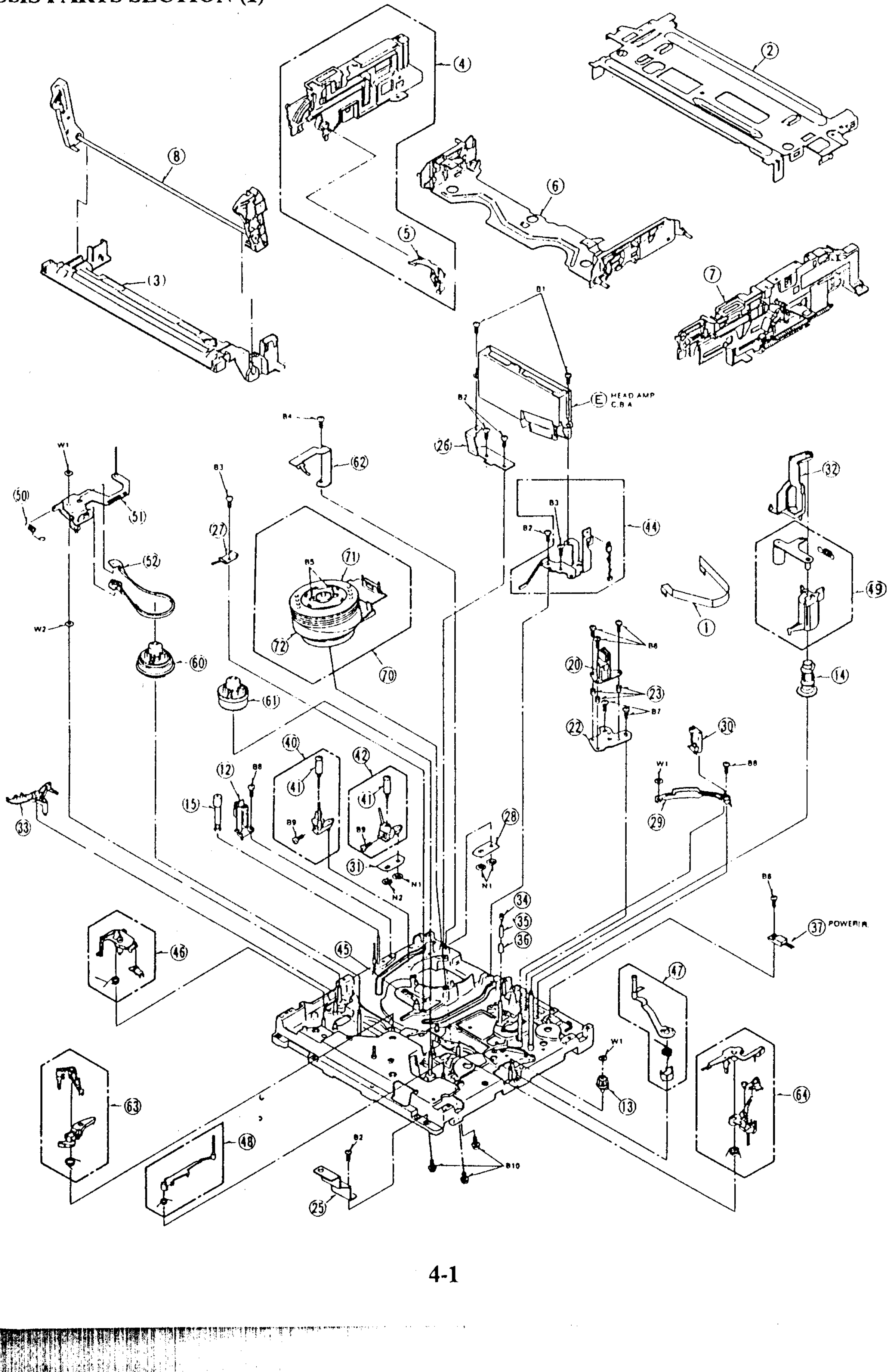

B
A
1
2
3
IC7853
IC7851
7
8
10
14
R7805
R7806
R7807
R7801
R7802
22
26
30
35
40
42
21
20
15
10
5
1
C
B
E
QR7801
QR7851
Q7802
QR7852
C7853
C7852
C7854
X7851
C7851
C7856
C7855
D7851
R7851
R7808
R7803
R7804
R7822
R7821
C7801
C7816
C7822
C7821
C7823
C7815
5
10

SECTION 4

EXPLODED VIEWS & PARTS LIST

4-1.EXPLODED VIEW MECHANICAL REPLACEMENT PARTS LIST

1.CHASSIS PARTS SECTION (1)


④
②
⑧
⑥
⑤
(3)
⑦
B1
Ⓔ HEAD AMP C.B.A
B2
(26)
B4
㊷
W1
(50)
(51)
B3
(27)
(52)
B5
(71)
(72)
(70)
B3
B2
㊹
㉜
①
㊾
B6
⑳
㉓
B7
㉒
⑭
W2
(60)
(61)
㉚
W1
B8
㉙
⑫
B8
⑮
㊵
㊶
㊷
㊶
B9
B9
㉝
㉛
N1
N2
㉘
N1
㉞
㉟
㊱
B8
㊲ POWER I.R.
㊺
㊻
㊼
W1
⑬
(63)
(64)
㊽
B2
B10
㉕

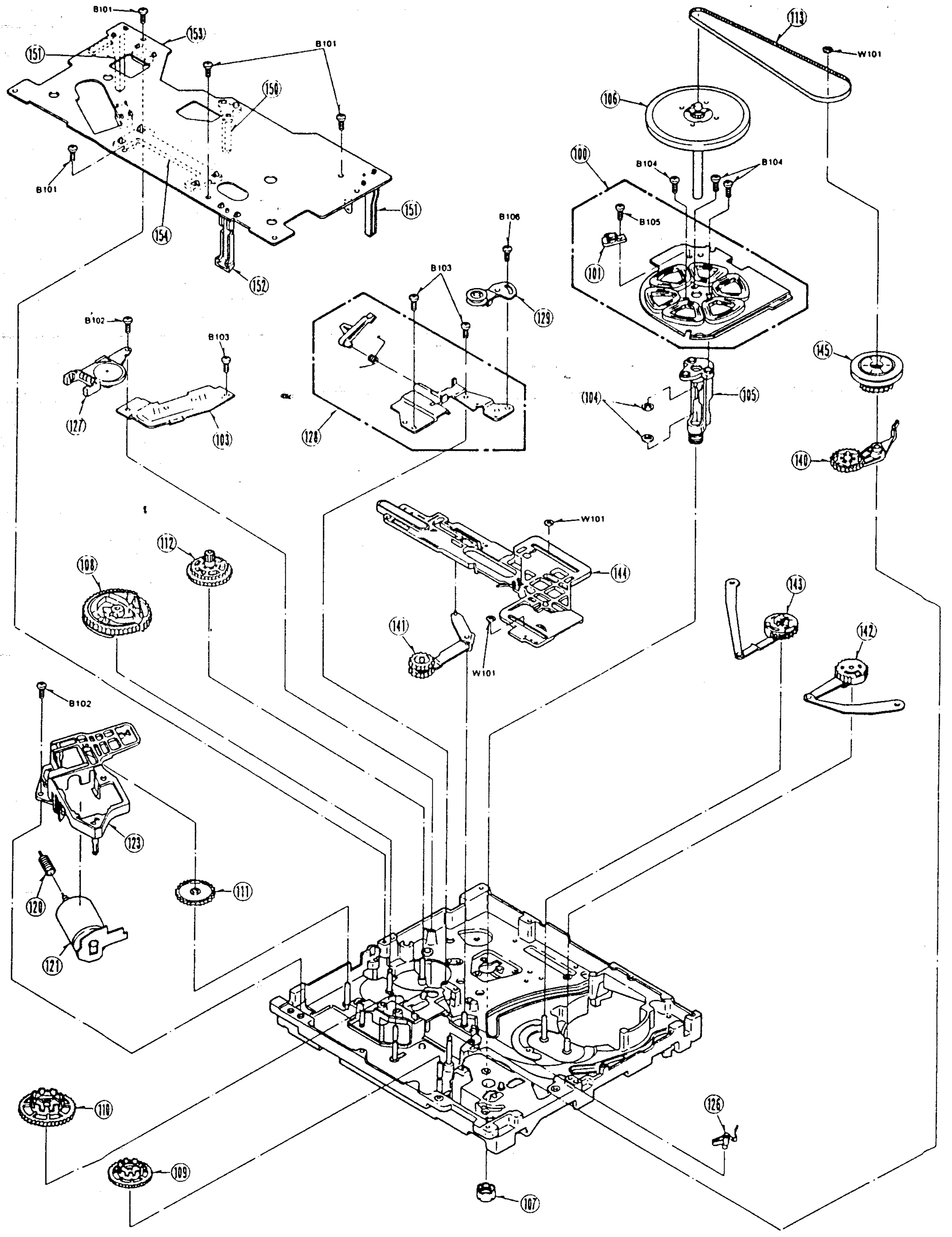
Note:1.* Be sure to make your orders of replacement parts according to this list.
2.IMPORTANT SAFETY NOTICE
Components identified with the mark <!> have the special characteristics for safety. When replacing any of these components,use only the same type.

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
1(1)		VWJ0758	FLEXIBLE CABLE (6P)	1	P4003-P1501
2(1)		VMA8644	TOP PLATE	1	
3(1)		VMA8787	CASSETTE GUIDE	1	
4(1)		VXA4660	SIDE PLATE (L) UNIT	1	
5(1)		VXL2250	OPENER LEVER UNIT	1	
6(1)		VXA4661	CASSETTE HOLDER PLATE UNIT	1	
7(1)		VXA4806	SIDE PLATE (R) UNIT	1	
8(1)		VXP1339	MAIN SHAFT UNIT	1	
12(1)		VBS0052	FE HEAD	1	
13(1)		VDG0871	CARRIAGE CONNECTION GEAR	1	
14(1)		VDG0886	PINCH CAM GEAR	1	
15(1)		VXP1402	IMPEDANCE ROLLER UNIT	1	
20(1)		VED0217	A/C HEAD (1) UNIT	1	
22(1)		VMA8624	A/C HEAD BASE	1	
23(1)		VMB2515	A/C HEAD SPRING	3	
25(1)		VMA8761	MOUNT ANGLE	1	
26(1)		VMA8763	HEAD AMP MOUNT ANGLE (L)	1	
27(1)		VMC0917	EARTH SPRING	1	
28(1)		VMA8874	INCLIND BASE HOLDER (S)	1	
29(1)		VMD2078	P5 STOPPER BASE	1	
30(1)		VXA4927	P5 POST STOPPER	1	
31(1)		VMA8873	INCLIND BASE HOLDER (T)	1	
32(1)		VMD2101	OPENER PIECE	1	
33(1)		VML2776	TENSION SPRING ARM	1	
34(1)		VMX1544	P4 UPPER LIMITER	1	
35(1)		VMX2175	P4 SLEEVE	1	
36(1)		VMX2176	P4 LOWER LIMITER	1	
37(1)		2SB941PSW	POWER TRANSISTOR	1	
40(1)		VXA4982KIT	INCLINED BASE (S) UNIT	1	
41(1)		VXP1415	ROLLER POST	2	
42(1)		VXA4984KIT	INCLINED BASE (T) UNIT	1	
44(1)		VXA4974	HEAD AMP MOUNT ANGLE (R) U.	1	
45(1)		VMS5383	CASSETTE POSITION FIXTURE	1	
46(1)		VXL2310	REVIEW ARM UNIT	1	
47(1)		VXL2306	P5 ARM UNIT	1	
48(1)		VXL2243	TAKE UP TENSION REGULATOR	1	
			ARM UNIT		
49(1)		VXL2246	PINCH ARM UNIT	1	
50(1)		VMB2434	TENSION SPRING	1	
51(1)		VXL2309	TENSION ARM (1) UNIT	1	
52(1)		VXZ0310	TENSION BAND UNIT	1	
60(1)		VXR0221	SUPPLY REEL TABLE UNIT	1	
61(1)		VXR0222	TAKE UP REEL TABLE UNIT	1	
62(1)		VXS0114	EARTH PLATE UNIT	1	
63(1)		VXZ0312	SUPPLY BRAKE ARM UNIT	1	
64(1)		VXZ0313	TAKE UP BRAKE ARM UNIT	1	
70(1)		VEG1134	CYLINDER UNIT	1	
71(1)		VEH0653	UPPER CYLINDER UNIT	1	
72(1)		VHD0534	RT CONNECTION C.B.A. SCREW	2	
B1(1)		VHD0773	SCREW	2	
B2(1)		XTV26+6F	SCREW	4	
B3(1)		XTV26+4F	SCREW	2	
B4(1)		XTN3+6FFZ	SCREW	1	
B5(1)		VHD0553	SCREW	2	
B6(1)		VHD0762	SCREW	3	
B7(1)		XTV26+6FZ	SCREW	2	
B8(1)		XTV26+8F	SCREW	3	
B9(1)		VHD0760	SCREW	2	
B10(1)		VHD0342	SCREW	3	
B11(1)		XYNV0029	SCREW	2	
N1(1)		VHN0192	NUT	3	
N2(1)		VHN0193	NUT	1	
W1(1)		VMX2208	WASHER	3	
W2(1)		XWGV26D5G	WASHER	1	

Note:1.* Be sure to make your orders of replacement parts according to this list.
2.IMPORTANT SAFETY NOTICE
Components identified with the mark <!> have the special characteristics for safety. When replacing any of these components,use only the same type.

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
100(2)		VEK5927	STATOR UNIT	1	
101(2)		VBK0061	FG HEAD	1	
103(2)		VMA8930	ROTOR STOPPER	1	
104(2)		VMX1927	OIL SEAL	2	
105(2)		VXD0140	HOUSING UNIT	1	
106(2)		VXP1350	ROTOR UNIT	1	
107(2)		VXQ0297	THRUST SCREW UNIT	1	
108(2)		VDG0913	MAIN CAM GEAR	1	
109(2)		VDG0956	SUPPLY REEL GEAR	1	
110(2)		VDG0957	TAKE UP REEL GEAR	1	
111(2)		VDG0868	WORM WHEEL GEAR	1	
112(2)		VDG0885	SUB CAM GEAR	1	
113(2)		VDV0235	TIMING BELT	1	
120(2)		VDG0866	WORM GEAR	1	
121(2)		VEM0427	LOADING MOTOR (1) UNIT	1	
123(2)		VMD1942	MOTOR BRACKET	1	
126(2)		VML2725	IDLER CONTROL LEVER	1	
127(2)		VSS0365	MODE SW	1	
128(2)		VMA8965	SS BRAKE BASE	1	
129(2)		VXA4799	TENSION ROLLER UNIT	1	
140(2)		VXL2366	IDLER ARM UNIT	1	
141(2)		VXL2372	DIRECT LEVER UNIT	1	
142(2)		VXL2299	SUPPLY LOADING ARM UNIT	1	
143(2)		VXL2300	TAKE UP LOADING ARM UNIT	1	
144(2)		VXL2307	MAIN LEVER UNIT	1	
145(2)		VXP1409	CENTRE CLUTCH	1	
150(2)		VMD1926	LED HOLDER	1	
151(2)		VMD1927	PHOTO TRANSISTOR HOLDER	2	
152(2)		VES0695	SAFETY TAB SW	1	
153(2)		VJB00S63	MECHANISM CONNECTION C.B.	1	ELECTRICAL PARTS ON
					THE C.B.A. IS LISTED
					ON ELECTRICAL PARTS
					LIST.
154(2)		VMD2029	REEL SHAFT GUIDE	1	
B101(2)		VHD0772	SCREW	4	
B102(2)		XTV26+8F	SCREW	2	
B103(2)		XTV26+6F	SCREW	3	
B104(2)		VHD0753	SCREW	3	
B105(2)		VHD0754	SCREW	1	
B106(2)		XSB26+4FZ	SCREW	1	
W101(2)		VMX2208	WASHER	3	

2.CHASSIS PARTS SECTION (2)


B101
153
151
B101
150
B101
154
151
152
113
W101
106
100
B104
B104
B105
101
B106
B103
129
B102
B103
127
103
128
145
104
105
140
W101
144
112
108
143
141
W101
142
B102
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126
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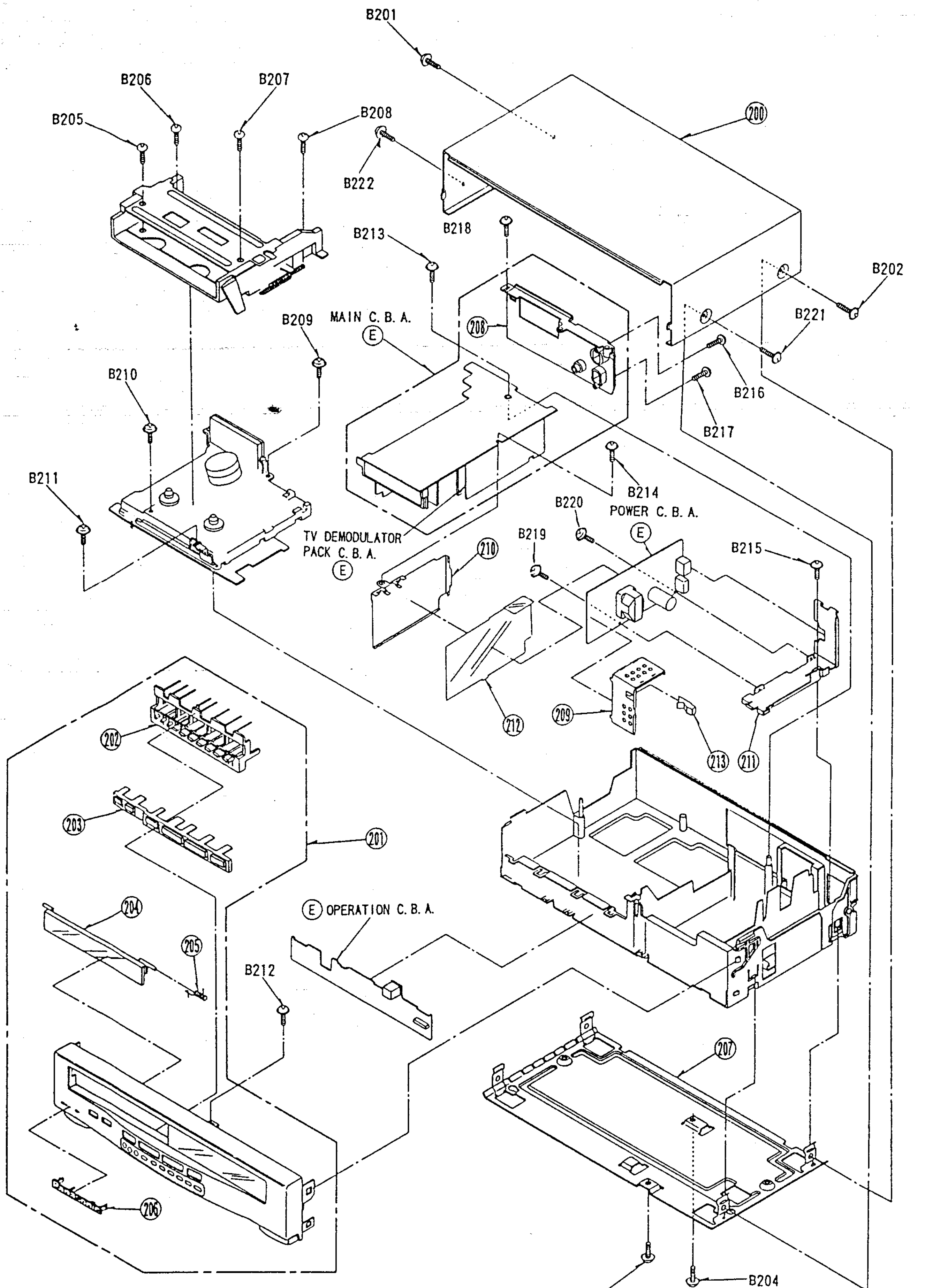
107

3.CASING PARTS SECTION


B201
B206
B207
B205
B208
(200)
B222
B213
B218
B202
B221
(208)
MAIN C. B. A.
Ⓔ
B209
B216
B217
B210
B214
B211
B220
POWER C. B. A.
Ⓔ
B219
TV DEMODULATOR PACK C. B. A.
Ⓔ
(210)
B215
(212)
(209)
(213)
(211)
(202)
(203)
(201)
(204)
(205)
B212
Ⓔ OPERATION C. B. A.
(207)
(206)
B203
B204

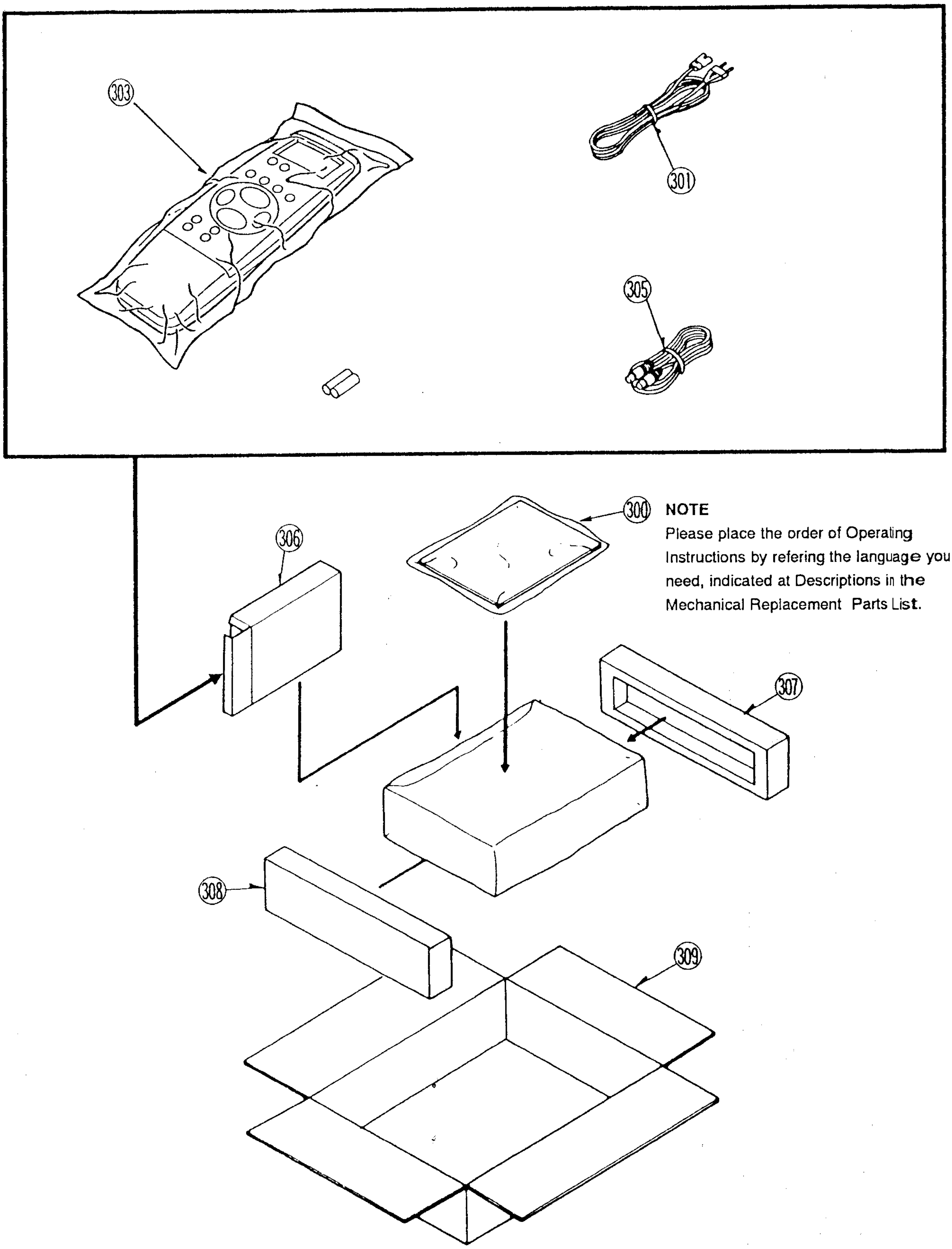
Note:1.* Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified with the mark <!> have the special characteristics for safety. When replacing any of these components,use only the same type.

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
200(3)		VGM1074	TOP PANEL	1	NV-SD25EO/B,SD22EO
					SUPPLIED FROM MBV
200(3)		VGM1075	TOP PANEL	1	NV-SD22EG,SD25EG
					SUPPLIED FROM MBV
201(3)		VYP5542	FRONT PANEL UNIT	1	NV-SD25EO
					SUPPLIED FROM MBV
201(3)		VYP5529	FRONT PANEL UNIT	1	NV-SD22EG
					SUPPLIED FROM MBV
201(3)		VYP5541	FRONT PANEL UNIT	1	NV-SD22EO
					SUPPLIED FROM MBV
201(3)		VYP5530	FRONT PANEL UNIT	1	NV-SD25B
					SUPPLIED FROM MBV
201(3)		VYP5531	FRONT PANEL UNIT	1	NV-SD25EG
					SUPPLIED FROM MBV
202(3)		VGU6652	BUTTON(A)	1	SUPPLIED FROM MBV
203(3)		VGU6502	BUTTON(B)	1	NV-SD25EO/B,SD22EO
203(3)		VGU6492	BUTTON(B)	1	NV-SD22EG,SD25EG
204(3)		VKF2131	BLINDER PANEL	1	
205(3)		VMB2521	BLINDER SPRING	1	
206(3)		VGB0298	NAME PLATE	1	
207(3)		VKU0400	BOTTOM PLATE	1	SUPPLIED FROM MBV
208(3)		VJH0724	JACK BOARD	1	NV-SD22,25EG/EO
					SUPPLIED FROM MBV
208(3)		VJH0729	JACK BOARD	1	NV-SD25B
					SUPPLIED FROM MBV
209(3)		VSC3982	SHIELD COVER (A)	1	
210(3)		VSC3983	SHIELD COVER (B)	1	
211(3)		VSC3981	POWER ANGLE	1	
212(3)		VMZ2239	POWER BARRIER	1	<!>
213(3)		VMC0357	TR HOLDER SPRING	1	
B201-B202		XTW3+10TFZ	SCREW	2	
B203-B204		VHD0059	SCREW	2	
B205-B208		XTV26+8F	SCREW	4	
B209-B211		VHD0168	SCREW	3	
B212-B215		VHD0773	SCREW	4	
B216-B217		XTV3+12JFZ	SCREW	2	
B218		VHD0773	SCREW	1	
B219-B220		VHD0418	SCREW	2	

Note:1.* Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified with the mark <!> have the special characteristics for safety. When replacing any of these components,use only the same type.

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
300(4)		VQT5684	OPERATING INSTRUCTIONS	1	<!>NV-SD25EO
			(ENGLISH)		SUPPLIED FROM MBV
300(4)		VQT5689	OPERATING INSTRUCTIONS	1	<!>NV-SD25EO
			(SPANISH/PORTUGUESE)		SUPPLIED FROM MBV
300(4)		VQT5549	OPERATING INSTRUCTIONS	1	<!>NV-SD22EO/EG
			(ENGLISH)		SUPPLIED FROM MBV
300(4)		VQT5551	OPERATING INSTRUCTIONS	1	<!>NV-SD22EO
			(SWEDISH/DANISH/FINNISH)		SUPPLIED FROM MBV
300(4)		VQT5553	OPERATING INSTRUCTIONS	1	<!>NV-SD22EO
			(SPANISH/PORTUGUESE)		SUPPLIED FROM MBV
300(4)		VQT5539	OPERATING INSTRUCTIONS	1	<!>NV-SD22EO/EG
			(GERMAN)		SUPPLIED FROM MBV
300(4)		VQT5550	OPERATING INSTRUCTIONS	1	<!>NV-SD22EO/EG
			(FRENCH/ITALIAN)		SUPPLIED FROM MBV
300(4)		VQT5552	OPERATING INSTRUCTIONS	1	<!>NV-SD22EO/EG
			(DUTCH)		SUPPLIED FROM MBV
300(4)		VQT5687	OPERATING INSTRUCTIONS	1	<!>NV-SD25EO
			(SWEDISH/DANNISH/FINNISH)		SUPPLIED FROM MBV
300(4)		VQT5685	OPERATING INSTRUCTIONS	1	<!>NV-SD25EO/EG
			(GERMAN)		SUPPLIED FROM MBV
300(4)		VQT5686	OPERATING INSTRUCTIONS	1	<!>NV-SD25EG/EO
			(FRENCH/ITALIAN)		SUPPLIED FROM MBV
300(4)		VQT5688	OPERATING INSTRUCTIONS	1	<!>NV-SD25EO
			(DUTCH)		SUPPLIED FROM MBV
300(4)		VQT5538	OPERATING INSTRUCTIONS	1	<!>NV-SD25B
			(ENGLISH)		SUPPLIED FROM MBV
301(4)		VJA0664	AC CORD	1	<!>NV-SD25EO/EG
					<!>NV-SD22EO/EG
301(4)		VJA0733	AC CORD	1	<!>NV-SD25B
302(4)		VEQ1582	REMOTE CONTROLLER	1	NV-SD22EG/EO
					SUPPLIED FROM MBV
302(4)		VEQ1570	REMOTE CONTROLLER	1	NV-SD25EG/EO
					SUPPLIED FROM MBV
302(4)		VEQ1571	REMOTE CONTROLLER	1	NV-SD25B
					SUPPLIED FROM MBV
305(4)		VJA0376	ANT(DIN)CABLE	1	NV-SD25EO/B,SD22EO
305(4)		VJA0710	ANT(DIN)CABLE	1	NV-SD22EG,SD25EG
306(4)		VPK0825	ACCESSORIES BOX	1	
307(4)		VPN3818	CUSHION (R)	1	
308(4)		VPN3817	CUSHION (L)	1	
309(4)		VPG7443	PACKING	1	NV-SD25EO
					SUPPLIED FROM MBV
309(4)		VPG7442	PACKING	1	NV-SD22EO
					SUPPLIED FROM MBV
309(4)		VPG7444	PACKING	1	NV-SD25B
					SUPPLIED FROM MBV
309(4)		VPG7440	PACKING	1	NV-SD22EG
					SUPPLIED FROM MBV
309(4)		VPG7441	PACKING	1	NV-SD25EG
					SUPPLIED FROM MBV

4.PACKING PARTS SECTION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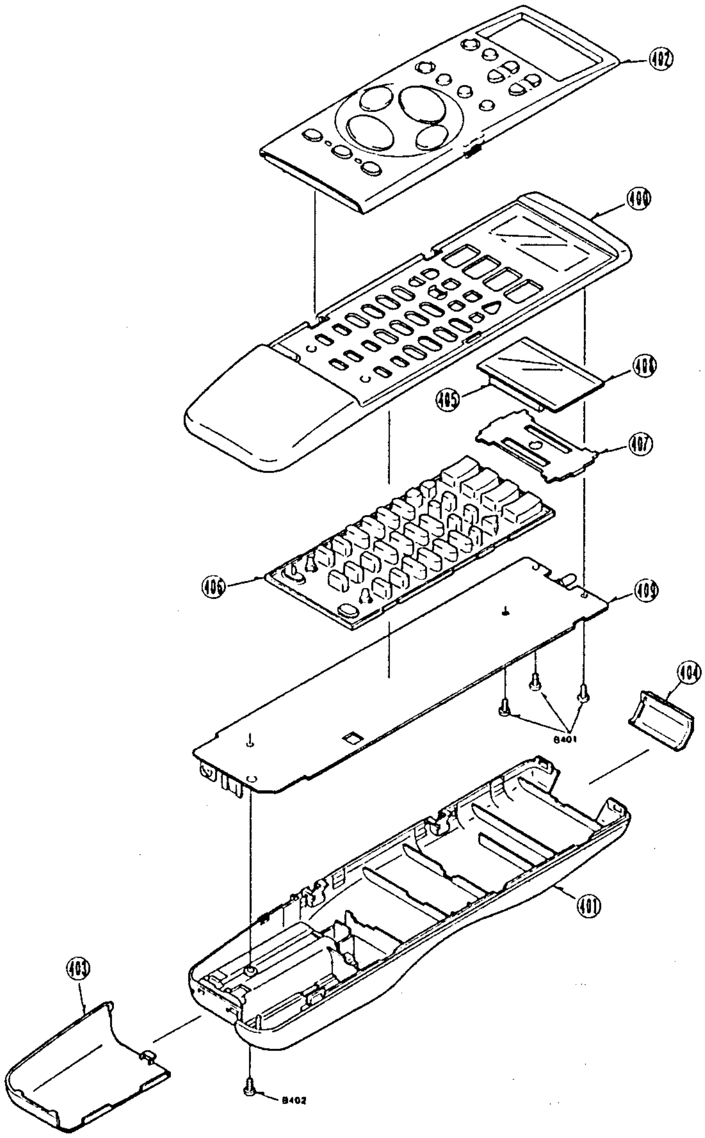
NOTE
Please place the order of Operating Instructions by refering the language you need, indicated at Descriptions in the Mechanical Replacement Parts List.

5.REMOTE CONTROLLER UNIT



Note: 1. * Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified with the mark ⟨!⟩ have the special characteristics for safety. When replacing any of these components, use only the same type.

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
400(5)		VYK5728	TOP COVER UNIT	1	NV-SD22EG/EO
					SUPPLIED FROM MBV
400(5)		VYK5729	TOP COVER UNIT	1	NV-SD25EG/EO
					SUPPLIED FROM MBV
400(5)		VYK5730	TOP COVER UNIT	1	NV-SD25B
					SUPPLIED FROM MBV
401(5)		VYK5446	BOTTOM COVER UNIT	1	
402(5)		VYK5731	DOOR PANEL UNIT	1	NV-SD22EG/EO
					SUPPLIED FROM MBV
402(5)		VYK5570	DOOR PANEL UNIT	1	NV-SD25EG/EO
					SUPPLIED FROM MBV
402(5)		VYK5659	DOOR PANEL UNIT	1	NV-SD25B
					SUPPLIED FROM MBV
403(5)		VKF2115	BATTERY COVER UNIT	1	
404(5)		VKW1802	IR WINDOW	1	
405(5)		VSQ0830	CONDUCTIVE RUBBER	2	
406(5)		VSP0809	RUBBER CONTACT	1	NV-SD22EG/EO
					SUPPLIED FROM MBV
406(5)		VSP0797	RUBBER CONTACT	1	NV-SD25EG/EO
					SUPPLIED FROM MBV
406(5)		VSP0799	RUBBER CONTACT	1	NV-SD25B
					SUPPLIED FROM MBV
407(5)		VSQ0829	LCD SPACER	1	
408(5)		VSL0319A	LCD	1	NV-SD22EG/EO
					NV-SD25EG/EO
					SUPPLIED FROM MBV
408(5)		VSL0327	LCD	1	NV-SD25B
					SUPPLIED FROM MBV
409(5)		----------	REMOTE CONTROLLER C.B.A.	1	THIS C.B.A. IS NOT
					SUPPLIED AS SPARE
					PART.
B401(5)		XTB2+6G	SCREW	3	
B402(5)		XTB2+8GFZ	SCREW	1	
			SERVISE FIXTURES & TOLLS		
		VFJ8125H3F	VHS ALIGNMENT TAPE (PAL)	1	
		VFK0335	RETAINING RING REMOVER	1	
			(3mm/4mm)		
		VFK0329	POST ADJUSTMENT SCREWDRIVER	1	
		VFK0326	HEX WRENCH SET	1	
		VFK0132	BACK TENSION METER	1	
		VFK27	HEAD CLEANING STICK	1	
		MOR265	MORLYTONE GREASE	1	
		VFK0341	UPPER CYLINDER REMOVER	1	
		VFK0680	WHITE GREASE	1	
		VFK0851	STATOR CENTERING TOOL	1	
		VFK0330	FINE ADJUSTMENT GEAR DRIVER	1	

4-2.ELECTRICAL REPLACEMENT PARTS LIST

Note:1.Be sure to make your orders of replacement parts according to this list.

2.IMPORTANT SAFETY NOTICE : Components identified with the mark <!> have the special characteristics for safety. When replacing any of these components,use only the same type.

3.Unless otherwise specified,
All resistors are in OHMS , K=1,000 OHMS. All capacitors are in MICROFARADS(uf),P=uuF.

4.The P.C.Board units marked width'■'show below the main assembled parts.

5.The marking(RTL) indicates the retention time is limited for this item. After the discontinuation of this assembly in production, it will no longer be available.

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
		VEP06954A	MAIN C.B.A.	1	(RTL)
			(Page:4-8)		NV-SD22EG,SD25EG
					SUPPLIED FROM MBV
					INCLUDING THE TV
					DEMODULATOR PACK
					C.B.A. (VEPC.749D),
					LUMINANCE &
					CHROMINANCE PACK
					C.B.A.(VEP03A59K),
					VPS C.B.A.
					(VEP07575F).
		VEP07749D	TV DEMODULATOR PACK C.B.A.	1	(RTL)
					NV-SD22EG,SD25EG
					SUPPLIED FROM MBV
					INCLUDED IN MAIN
					C.B.A.(VEP06954A).
		VEP03A59K	LUMINANANCE & CHROMINANCE	1	(RTL)
			PACK C.P A.		NV-SD22EG,SD25EG
					SUPPLIED FROM MBV
					INCLUDED IN MAIN
					C.B.A.(VEP06954A).
		VEP07575F	VPS C.B.A.	1	(RTL)
					NV-SD22EG,SD25EG
					SUPPLIED FROM MBV
					INCLUDED IN MAIN
					C.B.A.(VEP06954A).
		VEP06954C	MAIN C.B.A.	1	(RTL)
			(Page:4-13)		NV-SD22EO,SD25EO
					SUPPLIED FROM MBV
					INCLUDING THE TV
					DEMODULATOR PACK
					C.B.A.(VEP07749D),
					LUMINANCE &
					CHROMINANCE PACK
					C.B.A.(VEP03A59M),
		VEP07749D	TV DEMODULATOR PACK C.B.A.	1	(RTL)
					NV-SD22EO,SD25EO
					SUPPLIED FROM MBV
					INCLUDED IN MAIN
					C.B.A.(VEP06954C).
		VEP03A59M	LUMINANCE & CHROMINANCE	1	(RTL)
			PACK C.B.A.		NV-SD22EO,SD25EO
					SUPPLIED FROM MBV
					INCLUDED IN MAIN
					C.B.A.(VEP06954C).
		VEP06954B	MAIN C.B.A.	1	(RTL)
			(Page:4-17)		NV-SD25B
					SUPPLIED FROM MBV
					INCLUDING THE TV
					DEMODULATOR PACK
					C.B.A.(VEP07645AA),
					LUMINANCE &
					CHROMINANCE PACK
					C.B.A.(VEP03A59L),
		VEP07645AA	TV DEMODULATOR PACK C.B.A.	1	(RTL)
					NV-SD25B
					SUPPLIED FROM MBV
					INCLUDED IN MAIN
					C.B.A.(VEP06954B).
		VEP03A59L	LUMINANCE & CHROMINANCE	1	(RTL)
			PACK C.B.A.		NV-SD25B
					SUPPLIED FROM MBV
					INCLUDED IN MAIN
					C.B.A.(VEP06954B).
		VEP05200A	HEAD AMP C.B.A.	1	(RTL)
			(Page:4-22)		SUPPLIED FROM MBV
		VEP07761A	OPERATION C.B.A.	1	(RTL)
			(Page:4-22)		NV-SD22EG,SD25EG
					SUPPLIED FROM MBV
		VEP07761B	OPERATION C.B.A.	1	(RTL)
			(Page:4-22)		NV-SD22EO,SD25B/EO
					SUPPLIED FROM MBV
		VEP01583B	POWER C.B.A.	1	(RTL)<!>
			(Page:4-23)		NV-SD22EG,SD25EG
					SUPPLIED FROM MBV
		VEP01583A	POWER C.B.A.	1	(RTL)<!>
			(Page:4-23)		NV-SD22EO,SD25B/EO
					SUPPLIED FROM MBV
		-----------	MECHANISM CONNECTION C.B.A.	1	NOT SUPPLIED AS
			(Page:4-24)		C.B.A. (C.B. IS
					LISTED ON MECHANICAL
					PARTS LIST)
		-----------	MOTOR C.B.A.	1	C.B.A. IS INCLUDED
			(Page:4-24)		IN LOADING MOTOR (1
					UNIT (VEM0427).
		VEP00D18B	RT CONNECTOR C.B.A.	1	(RTL)
		ENC179N4	RF CONVERTER	1	<!>NV-SD22EG/EO
					NV-SD25EG/EO
					SUPPLIED FROM MBV
		ENC179N2	RF CONVERTER	1	<!>NV-SD25B
		ENV578D7H6	TUNER	1	<!>NV-SD22EG/EO
					NV-SD25EG/EO
		ENV87837H3R	TUNER	1	<!>NV-SD25B
F1101		VSF0107C16	FUSE	1	<!>
	■	VEP06954A	MAIN C.B.A.		(RTL)
					NV-SD22EG, SD25EG
					SUPPLIED FROM MBV
C301		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C302		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C303,04		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	2	
C305,06		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	2	
C308		ECUX1H680JCV	C.CAPACITOR CH 50V 68P	1	
C309		ECUX1H180JCV	C.CAPACITOR CH 50V 18P	1	
C310		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C311		ECUX1H080DCV	C.CAPACITOR CH 50V 8P	1	
C312		ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1	
C313		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C314		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C315		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C316		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C317		ECEA1EKN4R7	E.CAPACITOR 25V 4.7U	1	
C318		ECEA1HK2R2	E.CAPACITOR 50V 2.2U	1	
C319		ECEA1HK3R3	E.CAPACITOR 50V 3.3U	1	
C320		ECUM1H223KBX	C.CAPACITOR CH 50V 0.022U	1	
C321		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C322		ECUM1H333KBX	C.CAPACITOR CH 50V 0.033U	1	SUPPLIED FROM MBV
C323		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C325		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C326		ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C327		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C328		ECUM1H821JCX	C.CAPACITOR CH 50V 820P	1	SUPPLIED FROM MBV
C329		ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C330		ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C331		ECUX1H560JCV	C.CAPACITOR CH 50V 56P	1	
C332		ECUM1H561JCX	C.CAPACITOR CH 50V 560P	1	SUPPLIED FROM MBV
C333		ECUX1H151JCV	C.CAPACITOR CH 50V 150P	1	
C334		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C336		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C337		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C338,39		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	2	
C340		ECUX1H223ZFV	C.CAPACITOR CH 50V 0.022U	1	
C341		ECUX1H470JCV	C.CAPACITOR CH 50V 47P	1	
C342		ECUX1H820JCV	C.CAPACITOR CH 50V 82P	1	
C381		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C382,83		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	2	
C701		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	1	
C702		ECEA1CKS100	E.CAPACITOR 16V 10U	1	
C707		ECEA1HK0R1	E.CAPACITOR 50V 0.1U	1	
C708		ECEA1CKS100	E.CAPACITOR 16V 10U	1	
C710		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C717-20		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	4	
C721		ECEA1HKR27K	E.CAPACITOR 50V 0.27U	1	
C722		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C725		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C727		ECUM1H080DCN	C.CAPACITOR CH 50V 8OP	1	
C728		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C730		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C731		ECEA1CKS100	E.CAPACITOR 16V 10U	1	
C732		ECQV1H224B0	P.CAPACITOR 50V	1	
C734		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C735		ECUM1H070DCN	C.CAPACITOR CH 50V 7P	1	
C736		ECQB1H103JH	P.CAPACITOR 50V 0.01U	1	
C737		ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1	
C739		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C740		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C741		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C742		ECUM1H030CCN	C.CAPACITOR CH 50V 3P	1	
C743		ECUM1H270RCN	C.CAPACITOR CH 50V 27P	1	
C744		ECEA1HKR47	E.CAPACITOR 50V 0.47U	1	
C745		ECUM1H680JPN	C.CAPACITOR CH 50V 68P	1	
C746		ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1	
C748		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C749		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C760		ECQV1H563JZ	P.CAPACITOR 50V 0.056U	1	
C782		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C790		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C797,98		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C801-04		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	4	
C806		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C808		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C813		ECUX1H181JCV	C.CAPACITOR CH 50V 180P	1	
C814		ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1	
C815		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C839		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C840		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C841		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C842		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C843		ECUX1H223ZFV	C.CAPACITOR CH 50V 0.022U	1	
C844		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C845		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C846		ECUX1H390JCV	C.CAPACITOR CH 50V 39P	1	
C847		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C848		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C849		ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1	
C850		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C851		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C853		ECUX1H180JCV	C.CAPACITOR CH 50V 18P	1	
C854		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C855		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C856		ECUX1H222KBV	C.CAPACITOR CH 50V 2200P	1	
C857		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C858		ECUX1H822KBV	C.CAPACITOR CH 50V 8200P	1	
C859		ECEA1HKR33	E.CAPACITOR 50V 0.33U	1	
60		ECUM1H333KBX	C.CAPACITOR CH 50V 0.033U	1	SUPPLIED FROM MBV
C861		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C862		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C868		ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C869		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C892		ECUX1H223ZFV	C.CAPACITOR CH 50V 0.022U	1	
C893		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C1001		ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C1002		ECA1EM101	E.CAPACITOR 25V 100U	1	
C1003		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C1004		ECQV1H474JM	P.CAPACITOR 50V 0.47U	1	
C1007		ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C2001		ECEA1AKA220	E.CAPACITOR 10V 22U	1	
C2002		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C2003		ECUM1H392KBN	C.CAPACITOR CH 50V 3900P	1	
C2006		ECQV1H683JM	P.CAPACITOR 50V 0.068U	1	
C2008		ECUM1H472KBN	C.CAPACITOR CH 50V 4700P	1	
C2009		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C2010		ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C2012		ECA0JM221	E.CAPACITOR 6.3V 220U	1	
C2014		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C2015,16		ECEA1HKN3R3	E.CAPACITOR 50V 3.3U	2	
C2017		ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C2018		ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C2019		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C2020		ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C2021		ECEA1AKA220	E.CAPACITOR 10V 22U	1	
C2022		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2023		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C2024		ECUM1H392KBN	C.CAPACITOR CH 50V 3900P	1	
C2025		ECUM1H223ZFN	C.CAPACITOR CH 50V 0.22U	1	
C2026		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C2027		ECUM1C105ZFM	C.CAPACITOR CH 16V 1U	1	
C2501		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C2502		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C2503-05		ECUM1H104KBM	C.CAPACITOR CH 50V 0.1U	3	
C2506		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C2507-09		ECEA1VKN4R7	E.CAPACITOR 35V 4.7U	3	
C2510		ECUM1H473ZFN	C.CAPACITOR CH 50V 0.047U	1	
C2511		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C2512		ECEA1HKAR47	E.CAPACITOR 50V 0.47U	1	
C2513,14		ECEA1CKA101	E.CAPACITOR 16V 100U	2	
C2515-17		ECEA1HKA2R2	E.CAPACITOR 50V 2.2U	3	
C2518-21		ECUM1H333KBN	C.CAPACITOR CH 50V 0.033U	4	
C2523		ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C2524,25		ECEA1CKA470	E.CAPACITOR 16V 47U	2	
C2526		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C2527		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2528,29		ECUM1H333KBN	C.CAPACITOR CH 50V 0.033U	2	
C2530		ECQV1H683JM	P.CAPACITOR 50V 0.068U	1	
C2535		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C2536		ECUM1C474ZFM	C.CAPACITOR CH 16V 0.47U	1	
C2537		ECEA1AKA330	E.CAPACITOR 6.3V 33U	1	
C2538		ECUM1C105ZFM	C.CAPACITOR CH 16V 1U	1	
C2540		ECEA1AKA220	E.CAPACITOR 10V 22U	1	
C2541		ECEA1HKA4R7	E.CAPACITOR 50V 4.7U	1	
C2542		ECUM1E224ZFN	C.CAPACITOR 25V 0.22U	1	
C2543		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3003		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C3011		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3012		ECUM1H681JCN	C.CAPACITOR 50V 680P	1	
C3013		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C3014		ECA0JM471	E.CPAACITOR 6.3V 470U	1	
C3015		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3016		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C3018		ECUM1H121JCN	C.CAPACITOR CH 50V 120P	1	
C3019		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C3020		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3022		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3023		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3025		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3027		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3034		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3901,02		ECEA1CKA100	E.CAPACITOR 16V 10U	2	
C3911		ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C3922		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C4001		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C4002		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4003		ECQB1H822JZ	F.CAPACITOR 50V 8200P	1	
C4004		ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C4005		ECEA1CKA330	E.CAPACITOR 16V 33U	1	
C4006		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C4007		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C4008		ECEA1EKA4R7	E.CAPACITOR 25V 4.7U	1	
C4009		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C4010		ECEA1CKA330	E.CAPACITOR 16V 33U	1	
C4011		ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C4012		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C4013		ECEA16M33	E.CAPACITOR 16V 33U	1	
C4014		ECQP1332JZ	P.CAPACITOR 50V 3300P	1	
C4015		ECCD2H181J	C.CAPACITOR 500V 180P	1	
C4016		ECUM1H153KBN	C.CAPACITOR CH 50V 0.015U	1	
C4017,18		ECUM1H471JCN	C.CAPACITOR CH 50V 470P	2	
C4019		ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C4020,21		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C4022		ECQB1H103KF	P.CAPACITOR 50V 0.01U	1	
C4024		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C4025		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C4026		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C4027		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C6001		ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C6002		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C6003		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C6004		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6006,07		ECUM1H271JCN	C.CAPACITOR CH 50V 270P	2	
C6501		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C6502		ECUM1E224ZFN	C.CAPACITOR 25V 0.22U	1	
C6504		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7010		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7011		ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C7012		ECEA1CKA220	E.CAPACITOR 16V 22U	1	
C7021		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7022		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C7501		ECRHA010A54R	V.CAPACITOR	1	
C7502		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7503		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7504		ECA0JM102	E.CAPACITOR 6.3V 1000U	1	
C7505		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C7507		ECEA1HKA100	E.CAPACITOR 50V 10U	1	
C7508		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7510		ECEA1HKAR22	E.CAPACITOR 50V 0.22U	1	
C7513		ECEA0JKS470	E.CAPACITOR 6.3V 47U	1	
C7514		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7515		ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C7517		EECS5R5T224N	E.CAPACITOR 5.5V 0.22U	1	
C7518		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C7519		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C7520		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C7522,23		ECUM1H470JCN	C.CAPACITOR CH 50V 47P	2	
C7668		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7685		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C7801		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C7815		VCYE1C104MR1	S.CAPACITOR 16V 0.1U	1	
C7816		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	1	
C7821		ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1	
C7822		ECQB1H333JH	P.CAPACITOR 50V 0.033U	1	
C7823		ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C7851		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C7852		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C7853,54		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	2	
C7855,56		ECEA1HK010	E.CAPACITOR 50V 1U	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
D310		DA114	DIODE	1	SUPPLIED FROM MBV
D381		DA114	DIODE	1	SUPPLIED FROM MBV
D382		MA143	DIODE	1	
D383		MA141K	DIODE	1	
D710		MA3100L	DIODE	1	
D771		MA151WK	DIODE	1	
D772		MA165VT	DIODE	1	
D2501-05		1SS254	DIODE	5	
D2506		MA723VT	DIODE	1	
D3003,04		1SS254	DIODE	2	
D3901		1SS254	DIODE	1	
D6002,03		1SS254	DIODE	2	
D6501		MA4075-L	DIODE	1	
D7501		MA4220	DIODE	1	
D7502,03		MA151WA	DIODE	2	
D7504-06		MA151A	DIODE	3	
D7507		MA151WA	DIODE	1	
D7508-10		MA151A	DIODE	3	
D7521		MA723VT	DIODE	1	
D7672,73		MA3150-H	DIODE	2	
D7851		1SS254	DIODE	1	
DL802		EFDBR124A53T	DELAY	1	
DP7501		VSL0311	DISPLAY TUBE	1	
IC301		MSM7403MS	IC	1	
IC302		TDA9715H/A	IC	1	SUPPLIED FROM MBV
IC701		M51366SP-G	IC	1	SUPPLIED FROM MBV
IC2501		NA3814K	IC	1	
IC2502		XRA6870S	IC	1	
IC2503		LM358PS	IC	1	
IC3901		MM1111XFF	IC	1	
IC4001		LA7285	IC	1	
IC6001		MN67434VRSF	IC	1	
IC6501		XRA6887-V3	IC	1	SUPPLIED FROM MBV
IC7501		MN187164VZAK	IC	1	
IC7502		PST7043	IC	1	
IC7503		M6M80011AP	IC	1	
IC7504		PST7026	IC	1	
IC7851		MN158413AH1D	IC	1	
IC7853		SDA5642	IC	1	
J3901		VJS3544	CONNECTOR (FEMALE)	1	SUPPLIED FROM MBV
L301		VLQEL05S330K	COIL 33UH	1	
L302,03		VLQEL05S390K	COIL 39UH	2	
L304		VLQEL05S101K	COIL 100UH	1	
L306		VLQEL05S121K	COIL 120UH	1	
L307		VLQEL05S101K	COIL 100UH	1	
L308		VLQEL05S390K	COIL 39UH	1	
L701		ELESQ680KA	COIL 68UH	1	
L711		VLQ0305JR39	COIL H	1	
L712		VLQ0305JR22T	COIL H	1	
L714		VLQEL05R3R9K	COIL H	1	
L716		ELESQ560KA	COIL 56UH	1	
L717,18		ELESQ680KA	COIL 68UH	2	
L719		ELESQ120KA	COIL 12UH	1	
L802		VLQEL05S101K	COIL 100UH	1	
L803		VLQEL05S270K	COIL 27UH	1	
L805		VLQEL05S150K	COIL 15UH	1	
L808		VLQEL05S6R8J	COIL 6.8UH	1	
L809-11		VLQEL05S101K	COIL 100UH	3	
L812		ELESE1R0KA	COIL H	1	
L813		VLQEL05S101K	COIL 100UH	1	
L2001		ELESE101KA	COIL 100UH	1	
L2501		ELESE101KA	COIL 100UH	1	
L2503		VLP0125	COIL	1	
L3003		ELESN120KA	COIL H	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
L3004,05		ELESE101KA	COIL 100UH	2	
L3007		ELESN6R8JA	COIL	1	
L3008,09		ELESE101KA	COIL 100UH	2	
L4001		VLQEL07F153J	COIL 15MH	1	
L4002		ELESE471KA	COIL	1	
L4003		VLQ0188J101	COIL 100UH	1	
L4005		VLQ0188K1R0	COIL H	1	
L6001		VLP0074	COIL	1	
L6501		VLP0074	COIL	1	
L7001,02		ELESE101KA	COIL 100UH	2	
L7003		ELESE1R0KA		1	
L7004,05		ELESE101KA	COIL 100UH	2	
L7006		ELESE1R0KA		1	
L7020		ELESE470KA	COIL H	1	
L7501		VLQ0188J151	COIL 150UH	1	
L7502		ELESE101KA	COIL 100UH	1	
P1001		VJS3537A013G	CONNECTOR (FEMALE) 13P	1	
P2501		VJS3537A015G	CONNECTOR (FEMALE) 15P	1	
P2502		VJP1237T	CONNECTOR (MALE) 10P	1	
P2503		VJP3502	CONNECTOR (MALE)	1	
P3001		VJS3537A010G	CONNECTOR (FEMALE) 10P	1	
P4001		VJP1229T	CONNECTOR (MALE) 2P	1	
P4002		VJS2331	CONNECTOR (FEMALE)	1	
P6501		VJS3537A013G	CONNECTOR (FEMALE) 13P	1	
P7501		VJS3537A014G	CONNECTOR (FEMALE) 14P	1	
PP7001-03		VJP3043A005W	CONNECTOR (MALE) 5P	3	
PP7004		VJP3043A006W	CONNECTOR (MALE) 6P	1	
PP7005		VJP3043A005W	CONNECTOR (MALE) 5P	1	
PS301		VJR0800	CONNECTOR	1	SUPPLIED FROM MBV
PS701-03		VJS3043B005W	CONNECTOR (FEMALE) 5P	3	
PS704		VJS3043B006W	CONNECTOR (FEMALE) 6P	1	
Q301		2SC3930	TRANSISTOR	1	
Q391		2SB1218A	TRANSISTOR	1	
Q703		MSD601-S	TRANSISTOR	1	
Q712		2SC1317	TRANSISTOR	1	
Q713		MSD1328-S	TRANSISTOR	1	
Q771		MSD601-S	TRANSISTOR	1	
Q804		2SC3930	TRANSISTOR	1	
Q2502		2SB1321-R	TRANSISTOR	1	
Q2503		2SD1991A	TRANSISTOR	1	
Q2504		MSB709	TRANSISTOR	1	
Q2505,06		2SD1991A	TRANSISTOR	2	
Q3001		MSB709	TRANSISTOR	1	
Q3002		MSC2295	TRANSISTOR	1	
Q3906		2SB1320	TRANSISTOR	1	
Q4001		MSD602-R	TRANSISTOR	1	
Q4002		2SD601A	TRANSISTOR	1	
Q4003		MSB709	TRANSISTOR	1	
Q4004		MSB710-R	TRANSISTOR	1	
Q7020-23		MSD601-R	TRANSISTOR	4	
QR702		MRN1404	TRANSISTOR-RESISTOR	1	
QR714		MRN1402	TRANSISTOR-RESISTOR	1	
QR807		DTC144EU	TRANSISTOR-RESISTOR	1	
QR1001		MRN1402	TRANSISTOR-RESISTOR	1	
QR2001		XN1213	TRANSISTOR-TRANSISTOR	1	
QR3001,02		MRN2402	TRANSISTOR-RESISTOR	2	
QR3903		MRN1404	TRANSISTOR-RESISTOR	1	
QR4002		MRN1404	TRANSISTOR-RESISTOR	1	
QR4003		MRN2404	TRANSISTOR-RESISTOR	1	
QR4004		MRN1404	TRANSISTOR-RESISTOR	1	
QR6501		XN1211	TRANSISTOR-RESISTOR	1	
QR7501		MRN1404	TRANSISTOR-RESISTOR	1	
QR7801		DTA123YK	TRANSISTOR-RESISTOR	1	
QR7802		MRN1404	TRANSISTOR-RESISTOR	1	
QR7851		MRN1402	TRANSISTOR-RESISTOR	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
QR7852		MRN1404	TRANSISTOR-RESISTOR	1	
R305,06		ERJ3GSJ103	M.RESISTOR CH 1/16W 10K	2	SUPPLIED FROM MBV
R307		ERJ3GSJ272	M.RESISTOR CH 1/16W 2.7K	1	SUPPLIED FROM MBV
R308,09		ERJ3GSJ103	M.RESISTOR CH 1/16W 10K	2	SUPPLIED FROM MBV
R310		ERJ6GEYJ125	M.RESISTOR CH 1/10W 1.2M	1	
R311		ERJ3GSJ224	M.RESISTOR CH 1/16W 220K	1	SUPPLIED FROM MBV
R319		ERJ3GSJ221	M.RESISTOR CH 1/16W 220	1	SUPPLIED FROM MBV
R320		ERJ3GSJ102	M.RESISTOR CH 1/16W 1K	1	SUPPLIED FROM MBV
R321		ERJ3GSJ272	M.RESISTOR CH 1/16W 2.7K	1	SUPPLIED FROM MBV
R322		ERJ3GSJ822	M.RESISTOR CH 1/16W 8.2K	1	SUPPLIED FROM MBV
R325		ERJ3GSJ332	M.RESISTOR CH 1/16W 3.3K	1	SUPPLIED FROM MBV
R328		ERJ3GSJ102	M.RESISTOR CH 1/16W 1K	1	SUPPLIED FROM MBV
R329		ERJ3GSJ393	M.RESISTOR CH 1/16W 39K	1	SUPPLIED FROM MBV
R331,32		ERJ3GSJ103	M.RESISTOR CH 1/16W 10K	2	SUPPLIED FROM MBV
R333		ERJ3GSJ471	M.RESISTOR CH 1/16W 470	1	SUPPLIED FROM MBV
R334,35		ERJ3GSJ152	M.RESISTOR CH 1/16W 1.5K	2	SUPPLIED FROM MBV
R337		ERJ3GSJ103	M.RESISTOR CH 1/16W 10K	1	SUPPLIED FROM MBV
R338		ERJ3GSJ472	M.RESISTOR CH 1/16W 4.7K	1	SUPPLIED FROM MBV
R380		ERJ3GSJ473	M.RESISTOR CH 1/16W 47K	1	SUPPLIED FROM MBV
R382		ERJ3GSJ472	M.RESISTOR CH 1/16W 4.7K	1	SUPPLIED FROM MBV
R391		ERJ3GSJ272	M.RESISTOR CH 1/16W 2.7K	1	SUPPLIED FROM MBV
R392		ERJ3GSJ101	M.RESISTOR CH 1/16W 1K	1	SUPPLIED FROM MBV
R393		ERJ6GEYK225	M.RESISTOR CH 1/10W 2.2M	1	
R394		ERJ3GSJ682	M.RESISTOR CH 1/10W 6.8K	1	SUPPLIED FROM MBV
R716		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R717		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R718		ERJ6GEYJ754	M.RESISTOR CH 1/10W 750K	1	
R719		ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R720		ERJ6GEYJ622	M.RESISTOR CH 1/10W 6.2K	1	
R721		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
23		ERJ6GEYJ183	M.RESISTOR CH 1/10W 18K	1	
R724		ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R725		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R726		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R727		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R728		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R729,30		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	2	
R737		ERJ6GEYJ274	M.RESISTOR CH 1/10W 270K	1	
R738		ERJ6GEYJ334	M.RESISTOR CH 1/10W 330K	1	
R739		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R740		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R741		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R743		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	1	
R744		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R745		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R746		ERDS2TJ181	C.RESISTOR 1/4W 180	1	
R747		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R750		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R757		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R758		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R759		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R763		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R764		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R772		ERJ6GEYJ271	M.RESISTOR CH 1/10W 270	1	
R773		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R774		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R792		ERDS2TJ120	C.RESISTOR 1/4W 12	1	
R801		ERJ3GSJ181	M.RESISTOR CH 1/16W 180	1	SUPPLIED FROM MBV
R802		ERJ3GSJ821	M.RESISTOR CH 1/16W 820	1	SUPPLIED FROM MBV
R804		ERJ3GSJ393	M.RESISTOR CH 1/16W 39K	1	SUPPLIED FROM MBV
R805		ERJ3GSJ392	M.RESISTOR CH 1/16W 3.9K	1	SUPPLIED FROM MBV
R809		ERJ3GSJ101	M.RESISTOR CH 1/16W 100	1	SUPPLIED FROM MBV
R811		ERJ3GSJ821	M.RESISTOR CH 1/16W 820	1	SUPPLIED FROM MBV
R826		ERJ3GSJ122	M.RESISTOR CH 1/16W 1.2K	1	SUPPLIED FROM MBV
R827		ERJ3GSJ271	M.RESISTOR CH 1/16W 270	1	SUPPLIED FROM MBV
R835		ERJ3GSJ103	M.RESISTOR CH 1/16W 10K	1	SUPPLIED FROM MBV
R836		ERJ3GSJ472	M.RESISTOR CH 1/16W 4.7K	1	SUPPLIED FROM MBV
R837		ERJ3GSJ222	M.RESISTOR CH 1/16W 2.2K	1	SUPPLIED FROM MBV
R838		ERJ6GEYF271	M.RESISTOR CH 1/10W 270	1	
R839		ERJ3GSJ183	M.RESISTOR CH 1/16W 18K	1	SUPPLIED FROM MBV
R840		ERJ3GSJ103	M.RESISTOR CH 1/16W 10K	1	SUPPLIED FROM MBV
R843		ERJ3GSJ152	M.RESISTOR CH 1/16W 1.5K	1	SUPPLIED FROM MBV
R853		ERJ3GSJ473	M.RESISTOR CH 1/16W 47K	1	SUPPLIED FROM MBV

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R855		ERJ3GSJ473	M.RESISTOR CH 1/16W 47K	1	SUPPLIED FROM MBV
R856		ERJ3GSJ102	M.RESISTOR CH 1/16W 1K	1	SUPPLIED FROM MBV
R2001		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2002		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2003		ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
R2005		ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
R2006,07		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R2013		ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R2014		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R2015		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R2018		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2019		ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R2501		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R2502		ERDS2FJ1R5	C.RESISTOR 1/4W 1.2K	1	
R2503-05		ERDS2TJ150	C.RESISTOR 1/4W 15	3	
R2506		ERDS2FJ1R2	C.RESISTOR 1/4W 1.2	1	
R2507		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R2508		EROS2CKG6800	M.RESISTOR 1/4W 680	1	
R2509		ERX12SJR47	M.RESISTOR 1/12W 0.47U	1	
R2510-12		ERDS2TJ560	C.RESISTOR 1/4W 56	3	
R2513		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2514		ERDS1TJ561	C.RESISTOR 1/2W 560	1	
R2515		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2516		ERJ6GMYG432	M.RESISTOR CH 1/10W 4.3K	1	
R2517		ERJ6GMYG473	M.RESISTOR CH 1/10W 47K	1	
R2518		ERJ6GMYG133	M.RESISTOR CH 1/10W 13K	1	
R2519		ERJ6GMYG103	M.RESISTOR CH 1/10W 10K	1	
R2520		ERJ6GMYJ684	M.RESISTOR CH 1/10W 680K	1	
R2521		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R2522		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R2523		ERJ6GMYG821	M.RESISTOR CH 1/10W 820	1	
R2524		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R2525		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R2526		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2528		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2530		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2531		ERJ6GMYG201	M.RESISTOR CH 1/10W 200	1	
R2532,33		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	2	
R2534		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2535,36		ERJ6GMYG223	M.RESISTOR CH 1/10W 22K	2	
R2537		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R2538		ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R2539		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R2540		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R2541		ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
R2542,43		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	2	
R2544		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R2545		ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R3006		ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	1	
R3007		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3010		ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R3011		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R3013		ERJ6GMYJ361	M.RESISTOR CH 1/10W 360	1	
R3014		ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R3015		ERJ6GMYJ821	M.RESISTOR CH 1/10W 820	1	
R3018		ERJ6GMYJ821	M.RESISTOR CH 1/10W 820	1	
R3019		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R3020		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3023		ERJ6GMZOROO	M.RESISTOR 1/10W 0	1	
R3025		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3026		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R3038		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R3040		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R3901		ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	1	
R3902		ERDS2TJ750	C.RESISTOR 1/4W 75	1	
R3903,04		ERJ6GMYG242	M.RESISTOR CH 1/10W 2.4K	2	
R3905		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R3907		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3908,09		ERDS2TJ151	C.RESISTOR 1/4W 150	2	
R3918		ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R3919		ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R3938		ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R3944		ERDS2TJ180	C.RESISTOR 1/4W 18	1	
R3946		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R4002		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4003		ERJ6GMYJ123	M.RESISTOR CH 1/10W 12K	1	
R4004		ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R4005		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4006		ERJ6GMYJ621	M.RESISTOR CH 1/10W 620	1	
R4007		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R4008		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R4009		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R4010		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4011		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4012		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R4013		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4015		ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R4016		ERJ6GMYJ513	M.RESISTOR CH 1/10W 51K	1	
R4017		ERJ6GMYG752	M.RESISTOR CH 1/10W 7.5K	1	
R4018		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4019		ERJ6GMYJ824	M.RESISTOR CH 1/10W 820K	1	
R4020		ERJ6GMYG563	M.RESISTOR CH 1/10W 56K	1	
R4021		ERJ6GMYJ184	M.RESISTOR CH 1/10W 180K	1	
R4023		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4024		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R4025		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R4026		ERJ6GMYG472	M.RESISTOR CH 1/10W 4.7K	1	
R4027		ERJ6GMYJ474	M.RESISTOR CH 1/10W 470K	1	
R4028		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4029,30		ERJ6GMYG223	M.RESISTOR CH 1/10W 22K	2	
R4031		ERJ6GMYG103	M.RESISTOR CH 1/10W 10K	1	
R4032		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4033		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4034		ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R4035		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4040		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R4041		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R4042		ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R4043		ERJ6GMYJ100	M.RESISTOR CH 1/10W 10	1	
R6001,02		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R6003		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R6004,05		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R6006		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R6010		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R6011,12		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	2	
R6013		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R6016		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R6018		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R6021		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6501		ERX1SJ1R8	M.RESISTOR 1W 1.8	1	
R6502		ERJ6GMYG392	M.RESISTOR CH 1/10W 3.9K	1	
R6504		ERJ6GMYG182	M.RESISTOR CH 1/10W 1.8K	1	
R6505		ERJ6GMYG512	M.RESISTOR CH 1/10W 5.1K	1	
R6506		ERJ6GMYG913	M.RESISTOR CH 1/10W 91K	1	
R6508		ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
R6509		ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
R6510-12		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	3	
R6513-15		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	3	
R6516-20		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	5	
R7013		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R7014		ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R7022		ERJ6GMYJ274	M.RESISTOR CH 1/10W 270K	1	
R7023		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R7024		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R7025		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R7026,27		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R7028		ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R7029		ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R7030		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R7031		ERJ6GMYJ393	M.RESISTOR CH 1/10W 39K	1	
R7502		ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
R7503		ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
R7504		ERJ6GMYK2R2	M.RESISTOR CH 1/10W 2.2	1	
R7505		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R7506		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R7507,08		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R7509,10		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R7511		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R7512		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R7513		ERJ6GMYJ181	M.RESISTOR CH 1/10W 180	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R7515		ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
R7516		ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
R7519,20		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	2	
R7521		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R7523-25		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	3	
R7527		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R7528		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R7530-36		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	7	
R7676		ERG1SJ152	M.RESISTOR 1W 1.5K	1	
R7801		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R7802		ERJ6GEYJ824	M.RESISTOR CH 1/10W 820K	1	
R7803,04		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R7805		ERJ6GEYJ824	M.RESISTOR CH 1/10W 820K	1	
R7806		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R7807		ERJ6GEYG512	M.RESISTOR CH 1/10W 5.1K	1	
R7808		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R7821		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R7822		ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R7851		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
SW7001		ESD142129	SWITCH	1	
T703		EIV5EC013A	TRANSFORMER	1	
T704		EIV5EC006A1	TRANSFORMER	1	
T711		EIS5EC004A	TRANSFORMER	1	
T4001		EIQ7QF014Q	TRANSFORMER	1	
VR301		EVMEASA00B13	V.RESISTOR	1	
VR302		EVMEASA00B14	V.RESISTOR	1	
VR303,04		EVMEASA00B53	V.RESISTOR	2	
VR305,06		EVMEASA00B14	V.RESISTOR	2	
VR701		EVMEASA00B23	V.RESISTOR	1	
VR751		EVNCBAA00B53	V.RESISTOR	1	
VR2001		EVNDXAA00B54	V.RESISTOR 50K	1	
VR3012		EVNDXAA00B52	V.RESISTOR 500	1	
X710		VLF1035	CRYSTAL OSCILLATOR	1	
X711		VLF0638	CRYSTAL OSCILLATOR	1	
X712		VLF0637	CRYSTAL OSCILLATOR	1	
X716		EFCV4045A4	CRYSTAL OSCILLATOR	1	
X801		VSX0162	CRYSTAL OSCILLATOR	1	
X6001		VSX0479	CRYSTAL OSCILLATOR	1	
X7501		VSX0608	CRYSTAL OSCILLATOR	1	
X7502		VSX0094	CRYSTAL OSCILLATOR	1	
X7851		EF0A4R0M03C2	CRYSTAL OSCILLATOR	1	
			MISCELLANEOUS		
		VJF1114	FIP HOLDER	1	SUPPLIED FROM MBV
		VJH0724	JACK PLATE	1	
		VMA6768	EARTH ANGLE	1	
		VSC4025	SHIELD COVER (MAIN)	1	FOR TV DEMODU. C.B.A.
		VSC3241	SHIELD COVER (TOP)	2	FOR TV DEMODU. C.B.A.
		VSC2714	SHIELD COVER (BOTTOM)	1	FOR TV DEMODU. C.B.A.
		ENV578D7H6	TUNER	1	FOR TV DEMODU. C.B.A.
		VJR0189	CONNECTOR	1	FOR VPS C.B.A.
		VWJ14HW210BB	CABLE (P7501-P6601)	1	
		VWJ0807	CABLE (P2501-P1507)	1	SUPPLIED FROM MBV
		VWJ0808	CABLE (P3001-P501)	1	SUPPLIED FROM MBV
		VWJ0687	CABLE (P6501-P1505)	1	
		VWJ0810	CABLE (P1001-P1102)	1	SUPPLIED FROM MBV
		VEE8794	CABLE (P2502-P202)	1	
		VEE8564	CABLE (P2503-POWER TR.)	1	
		VEE8796	CABLE (P4001-FE HEAD)	1	
	■	VEP06954C	MAIN C.B.A.		(RTL)
					NV-SD22EO,SD25EO
					SUPPLIED FROM MBV
C301		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C302		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C303,04		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	2	
C305,06		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	2	
C307		ECUX1H390JCV	C.CAPACITOR CH 50V 39P	1	
C308		ECUX1H680JCV	C.CAPACITOR CH 50V 68P	1	
C309		ECUX1H180JCV	C.CAPACITOR CH 50V 18P	1	
C310		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C311		ECUX1H080DCV	C.CAPACITOR CH 50V 8P	1	
C312		ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1	
C313		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C314		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C315		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C316		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C317		ECEA1EKN4R7	E.CAPACITOR 25V 4.7U	1	
C318		ECEA1HK2R2	E.CAPACITOR 50V 2.2U	1	
C319		ECEA1HK3R3	E.CAPACITOR 50V 3.3U	1	
C320		ECUM1H223KBX	C.CAPACITOR CH 50V 0.022U	1	
C321		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C322		ECUM1H333KBX	C.CAPACITOR CH 50V 0.033U	1	SUPPLIED FROM MBV
C323		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C325		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C326		ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C327		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C328		ECUM1H821JCX	C.CAPACITOR CH 50V 820P	1	SUPPLIED FROM MBV
C329		ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C330		ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C331		ECUX1H560JCV	C.CAPACITOR CH 50V 56P	1	
C332		ECUM1H561JCX	C.CAPACITOR CH 50V 560P	1	SUPPLIED FROM MBV
C333		ECUX1H151JCV	C.CAPACITOR CH 50V 150P	1	
C334		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C336		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C337		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C338,39		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	2	
C340		ECUX1H223ZFV	C.CAPACITOR CH 50V 0.022U	1	
C341		ECUX1H470JCV	C.CAPACITOR CH 50V 47P	1	
C342		ECUX1H820JCV	C.CAPACITOR CH 50V 82P	1	
C381		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C382,83		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	2	
C701		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	1	
C702		ECEA1CKS100	E.CAPACITOR 16V 10U	1	
C707		ECEA1HK0R1	E.CAPACITOR 50V 0.1U	1	
C708		ECEA1CKS100	E.CAPACITOR 16V 10U	1	
C710		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C717-20		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	4	
C721		ECEA1HKR27K	E.CAPACITOR 50V 0.27U	1	
C722		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C725		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C727		ECUM1H080DCN	C.CAPACITOR CH 50V 80P	1	
C728		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C730		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C731		ECEA1CKS100	E.CAPACITOR 16V 10U	1	
C732		ECQV1H224B0	C.CAPACITOR CH 50V 0.22U	1	
C734		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C735		ECUM1H070DCN	C.CAPACITOR CH 50V 7P	1	
C736		ECQB1H103JH	P.CAPACITOR 50V 0.01U	1	
37		ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1	
C739		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C740		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C741		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C742		ECUM1H030CCN	C.CAPACITOR CH 50V 3P	1	
C743		ECUM1H270RCN	C.CAPACITOR CH 50V 27P	1	
C744		ECEA1HKR47	E.CAPACITOR 50V 0.47U	1	
C745		ECUM1H680JPN	C.CAPACITOR CH 50V 68P	1	
C746		ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1	
C748		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C749		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C760		ECQV1H563JZ	P.CAPACITOR 50V 0.056U	1	
C782		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C790		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C797,98		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C801-04		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	4	
C806		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C808		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C813		ECUX1H181JCV	C.CAPACITOR CH 50V 180P	1	
C814		ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C815		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C839		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C840		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C841		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C842		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C843		ECUX1H223ZFV	C.CAPACITOR CH 50V 0.022U	1	
C844		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C845		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C846		ECUX1H390JCV	C.CAPACITOR CH 50V 39P	1	
C847		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C848		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C849		ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1	
C850		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C851		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C853		ECUX1H180JCV	C.CAPACITOR CH 50V 18P	1	
C854		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C856		ECUX1H222KBV	C.CAPACITOR CH 50V 2200P	1	
C857		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C858		ECUX1H822KBV	C.CAPACITOR CH 50V 8200P	1	
C859		ECEA1HKR33	E.CAPACITOR 50V 0.33U	1	
C860		ECUM1H333KBX	C.CAPACITOR CH 50V 0.033U	1	SUPPLIED FROM MBV
C861		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C862		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C869		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C893		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C1001		ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C1002		ECA1EM101	E.CAPACITOR 25V 100U	1	
C1003		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C1004		ECQV1H474JM	P.CAPACITOR 50V 0.47U	1	
C1007		ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C2001		ECEA1AKA220	E.CAPACITOR 10V 22U	1	
C2002		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C2003		ECUM1H392KBN	C.CAPACITOR CH 50V 3900P	1	
C2006		ECQV1H683JM	P.CAPACITOR 50V 0.068U	1	
C2008		ECUM1H472KBN	C.CAPACITOR CH 50V 4700P	1	
C2009		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C2010		ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C2012		ECA0JM221	E.CAPACITOR 6.3V 220U	1	
C2014		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C2015,16		ECEA1HKN3R3	E.CAPACITOR 50V 3.3U	2	
C2017		ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C2018		ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C2019		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C2020		ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C2021		ECEA1AKA220	E.CAPACITOR 10V 22U	1	
C2022		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2023		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C2024		ECUM1H392KBN	C.CAPACITOR CH 50V 3900P	1	
C2025		ECUM1H223ZFN	C.CAPACITOR CH 50V 0.022U	1	
C2026		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C2027		ECUM1C105ZFM	C.CAPACITOR CH 16V 1U	1	
C2501		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C2502		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C2503-05		ECUM1H104KBM	C.CAPACITOR CH 50V 0.1U	3	
C2506		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C2507-09		ECEA1VKN4R7	E.CAPACITOR 35V 4.7U	3	
C2510		ECUM1H473ZFN	C.CAPACITOR CH 50V 0.047U	1	
C2511		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C2512		ECEA1HKAR47	E.CAPACITOR 50V 0.47U	1	
C2513,14		ECEA1CKA101	E.CAPACITOR 16V 100U	2	
C2515-17		ECEA1HKA2R2	E.CAPACITOR 50V 2.2U	3	
C2518-21		ECUM1H333KBN	C.CAPACITOR CH 50V 0.033U	4	
C2523		ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C2524,25		ECEA1CKA470	E.CAPACITOR 16V 47U	2	
C2526		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C2527		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2528,29		ECUM1H333KBN	C.CAPACITOR CH 50V 0.033U	2	
C2530		ECQV1H683JM	P.CAPACITOR 50V 0.068U	1	
C2535		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C2536		ECUM1C474ZFM	C.CAPACITOR CH 16V 0.47U	1	
C2537		ECEA1AKA330	E.CAPACITOR 6.3V 33U	1	
C2538		ECUM1C105ZFM	C.CAPACITOR CH 16V 1U	1	
C2540		ECEA1AKA220	E.CAPACITOR 10V 22U	1	
C2541		ECEA1HKA4R7	E.CAPACITOR 50V 4.7U	1	
C2542		ECUM1E224ZFN	C.CAPACITOR 25V 0.22U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C2543		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3003		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C3011		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3012		ECUM1H681JCN	C.CAPACITOR 50V 680P	1	
C3013		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C3014		ECA0JM471	E.CPAACITOR 6.3V 470U	1	
C3015		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3016		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C3018		ECUM1H121JCN	C.CAPACITOR CH 50V 120P	1	
C3019		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C3020.		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3022		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3023		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3025		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3027		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3034		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3901,02		ECEA1CKA100	E.CAPACITOR 16V 10U	2	
C3911		ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C3922		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C4001		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C4002		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4003		ECQB1H822JZ	F.CAPACITOR 50V 8200P	1	
C4004		ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C4005		ECEA1CKA330	E.CAPACITOR 16V 33U	1	
C4006		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C4007		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C4008		ECEA1EKA4R7	E.CAPACITOR 25V 4.7U	1	
C4009		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C4010		ECEA1CKA330	E.CAPACITOR 16V 33U	1	
C4011		ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C4012		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C4013		ECEA16M33	E.CAPACITOR 16V 33U	1	
C4014		ECQP1332JZ	P.CAPACITOR 50V 3300P	1	
C4015		ECCD2H181J	C.CAPACITOR 500V 180P	1	
C4016		ECUM1H153KBN	C.CAPACITOR CH 50V 0.15U	1	
C4017,18		ECUM1H471JCN	C.CAPACITOR CH 50V 470P	2	
C4019		ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C4020,21		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C4022		ECQB1H103KF	P.CAPACITOR 50V 0.01U	1	
C4024		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C4025		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C4026		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C4027		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C6001		ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C6002		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C6003		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C6004		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6006,07		ECUM1H271JCN	C.CAPACITOR CH 50V 270P	2	
C6501		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C6502		ECUM1E224ZFN	C.CAPACITOR 25V 0.22U	1	
C6504		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7010		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7011		ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C7012		ECEA1CKA220	E.CAPACITOR 16V 22U	1	
C7021		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7022		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C7501		ECRHA010A54R	V.CAPACITOR	1	
C7502		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7503		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7504		ECA0JM102	E.CAPACITOR 6.3V 1000U	1	
C7505		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C7507		ECEA1HKA100	E.CAPACITOR 50V 10U	1	
C7508		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7510		ECEA1HKAR22	E.CAPACITOR 50V 0.22U	1	
C7513		ECEA0JKS470	E.CAPACITOR 6.3V 47U	1	
C7514		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7515		ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C7517		EECS5R5T224N	E.CAPACITOR 5.5V 0.22U	1	
C7518		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C7519		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C7520		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C7522,23		ECUM1H470JCN	C.CAPACITOR CH 50V 47P	2	
C7668		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7685		ECEA1HK010	E.CAPACITOR 50V 1U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
D310		DA114	DIODE	1	SUPPLIED FROM MBV
D381		DA114	DIODE	1	SUPPLIED FROM MBV
D382		MA143	DIODE	1	
D383		MA141K	DIODE	1	
D710		MA3100L	DIODE	1	
D771		MA151WK	DIODE	1	
D772		MA165VT	DIODE	1	
D2501-05		1SS254	DIODE	5	
D2506		MA723VT	DIODE	1	
D3003,04		1SS254	DIODE	2	
D3901		1SS254	DIODE	1	
D6002,03		1SS254	DIODE	2	
D6501		MA4075-L	DIODE	1	
D7501		MA4220	DIODE	1	
D7502,03		MA151WA	DIODE	2	
D7504-10		MA151A	DIODE	7	
D7513		MA151A	DIODE	1	
D7521		MA723VT	DIODE	1	
D7672,73		MA3150-H	DIODE	2	
DL802		EFDBR124A53T	DELAY	1	
DP7501		VSL0311	DISPLAY TUBE	1	
IC301		MSM7403MS	IC	1	
IC302		TDA9715H/A	IC	1	SUPPLIED FROM MBV
IC701		M51366SP-G	IC	1	SUPPLIED FROM MBV
IC2501		NA3814K	IC	1	
IC2502		XRA6870S	IC	1	
IC2503		LM358PS	IC	1	
IC3901		MM1111XFF	IC	1	
IC4001		LA7285	IC	1	
IC6001		MN67434VRSF	IC	1	
IC6501		XRA6887-V3	IC	1	SUPPLIED FROM MBV
IC7501		MN187164VZAK	IC	1	
IC7502		PST7043	IC	1	
IC7503		M6M80011AP	IC	1	
IC7504		PST7026	IC	1	
J3901		VJS3544	CONNECTOR (FEMALE)	1	SUPPLIED FROM MBV
L301		VLQEL05S330K	COIL 33UH	1	
L302,03		VLQEL05S390K	COIL 39UH	2	
L304		VLQEL05S101K	COIL 100UH	1	
L306		VLQEL05S121K	COIL 120UH	1	
L307		VLQEL05S101K	COIL 100UH	1	
L308		VLQEL05S390K	COIL 39UH	1	
L701		ELESQ680KA	COIL 68UH	1	
L711		VLQ0305JR39	COIL H	1	
L712		VLQ0305JR22T	COIL H	1	
L714		VLQEL05R3R9K	COIL H	1	
L716		ELESQ560KA	COIL 56UH	1	
L717,18		ELESQ680KA	COIL 68UH	2	
L719		ELESQ120KA	COIL 12UH	1	
L802		VLQEL05S101K	COIL 100UH	1	
L803		VLQEL05S270K	COIL 27UH	1	
L805		VLQEL05S150K	COIL 15UH	1	
L808		VLQEL05S6R8J	COIL 6.8UH	1	
L809-11		VLQEL05S101K	COIL 100UH	3	
L2001		ELESE101KA	COIL 100UH	1	
L2501		ELESE101KA	COIL 100UH	1	
L2503		VLP0125	COIL	1	
L3003		ELESN120KA	COIL H	1	
L3004,05		ELESE101KA	COIL 100UH	2	
L3007		ELESN6R8JA	COIL	1	
L3008,09		ELESE101KA	COIL 100UH	2	
L4001		VLQEL07F153J	COIL 15MH	1	
L4002		ELESE471KA	COIL	1	
L4003		VLQ0188J101	COIL 100UH	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
L6001		VLP0074	COIL	1	
L6501		VLP0074	COIL	1	
L7001,02		ELESE101KA	COIL 100UH	2	
L7003		ELESE1R0KA	COIL	1	
L7004,05		ELESE101KA	COIL 100UH	2	
L7006		ELESE1R0KA	COIL	1	
L7020		ELESE470KA	COIL H	1	SUPPLIED FROM MBV
L7501		VLQ0188J151	COIL 150UH	1	
L7502		ELESE101KA	COIL 100UH	1	
P1001		VJS3537A013G	CONNECTOR (FEMALE) 13P	1	
P2501		VJS3537A015G	CONNECTOR (FEMALE) 15P	1	
P2502		VJP1237T	CONNECTOR (MALE) 10P	1	
P2503		VJP3483	CONNECTOR (MALE)	1	SUPPLIED FROM MBV
P3001		VJS3537A010G	CONNECTOR (FEMALE) 10P	1	
P4001		VJP1229T	CONNECTOR (MALE) 2P	1	
P4002		VJS2331	CONNECTOR (FEMALE)	1	
P6501		VJS3537A013G	CONNECTOR (FEMALE) 13P	1	
P7501		VJS3537A014G	CONNECTOR (FEMALE) 14P	1	
PP6707		VJP3043A010W	CONNECTOR (MALE) 10P	1	
PP7001-03		VJP3043A005W	CONNECTOR (MALE) 5P	3	
PP7004		VJP3043A006W	CONNECTOR (MALE) 6P	1	
PP7005		VJP3043A005W	CONNECTOR (MALE) 5P	1	
PS301		VJR0800	CONNECTOR	1	SUPPLIED FROM MBV
PS701-03		VJS3043B005W	CONNECTOR (FEMALE) 5P	3	
PS704		VJS3043B006W	CONNECTOR (FEMALE) 6P	1	
Q301		2SC3930	TRANSISTOR	1	
Q391		2SB1218A	TRANSISTOR	1	
Q703		MSD601-S	TRANSISTOR	1	
Q712		2SC1317	TRANSISTOR	1	
Q713		MSD1328-S	TRANSISTOR	1	
Q771		MSD601-S	TRANSISTOR	1	
Q804		2SC3930	TRANSISTOR	1	
Q2502		2SB1321-R	TRANSISTOR	1	
Q2503		2SD1991A	TRANSISTOR	1	
Q2504		MSB709	TRANSISTOR	1	
Q2505,06		2SD1991A	TRANSISTOR	2	
Q3001		MSB709	TRANSISTOR	1	
Q3002		MSC2295	TRANSISTOR	1	
Q3906		2SB1320	TRANSISTOR	1	
Q4001		MSD602-R	TRANSISTOR	1	
Q4002		2SD601A	TRANSISTOR	1	
Q4003		MSB709	TRANSISTOR	1	
Q4004		MSB710-R	TRANSISTOR	1	
Q7020-23		MSD601-R	TRANSISTOR	4	
QR702		MRN1404	TRANSISTOR-RESISTOR	1	
QR714		MRN1402	TRANSISTOR-RESISTOR	1	
QR807		DTC144EU	TRANSISTOR-RESISTOR	1	
QR1001		MRN1402	TRANSISTOR-RESISTOR	1	
QR2001		XN1213	TRANSISTOR-TRANSISTOR	1	
QR3001,02		MRN2402	TRANSISTOR-RESISTOR	2	
QR3903		MRN1404	TRANSISTOR-RESISTOR	1	
QR4002		MRN1404	TRANSISTOR-RESISTOR	1	
QR4003		MRN2404	TRANSISTOR-RESISTOR	1	
QR4004		MRN1404	TRANSISTOR-RESISTOR	1	
QR6501		XN1211	TRANSISTOR-RESISTOR	1	
QR7501		MRN1404	TRANSISTOR-RESISTOR	1	
R305,06		ERJ3GSJ103	M.RESISTOR CH 1/16W 10K	2	SUPPLIED FROM MBV
R307		ERJ3GSJ272	M.RESISTOR CH 1/16W 2.7K	1	SUPPLIED FROM MBV
R308,09		ERJ3GSJ103	M.RESISTOR CH 1/16W 10K	2	SUPPLIED FROM MBV
R310		ERJ6GEYJ12'	M.RESISTOR CH 1/10W 1.2M	1	
R311		ERJ3GSJ224	M.RESISTOR CH 1/16W 240K	1	SUPPLIED FROM MBV
R319		ERJ3GSJ221	M.RESISTOR CH 1/16W 220	1	SUPPLIED FROM MBV
R320		ERJ3GSJ102	M.RESISTOR CH 1/16W 1K	1	SUPPLIED FROM MBV

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R321		ERJ3GSJ272	M.RESISTOR CH 1/16W 2.7K	1	SUPPLIED FROM MBV
R322		ERJ3GSJ822	M.RESISTOR CH 1/16W 8.2K	1	SUPPLIED FROM MBV
R325		ERJ3GSJ332	M.RESISTOR CH 1/16W 3.3K	1	SUPPLIED FROM MBV
R328		ERJ3GSJ102	M.RESISTOR CH 1/16W 1K	1	SUPPLIED FROM MBV
R329		ERJ3GSJ393	M.RESISTOR CH 1/16W 39K	1	SUPPLIED FROM MBV
R331,32		ERJ3GSJ103	M.RESISTOR CH 1/16W 10K	2	SUPPLIED FROM MBV
R333		ERJ3GSJ471	M.RESISTOR CH 1/16W 470	1	SUPPLIED FROM MBV
R334,35		ERJ3GSJ152	M.RESISTOR CH 1/16W 1.5K	2	SUPPLIED FROM MBV
R337		ERJ3GSJ103	M.RESISTOR CH 1/16W 10K	1	SUPPLIED FROM MBV
R338		ERJ3GSJ472	M.RESISTOR CH 1/16W 4.7K	1	SUPPLIED FROM MBV
R380		ERJ3GSJ473	M.RESISTOR CH 1/16W 47K	1	SUPPLIED FROM MBV
R382		ERJ3GSJ472	M.RESISTOR CH 1/16W 4.7K	1	SUPPLIED FROM MBV
R391		ERJ3GSJ272	M.RESISTOR CH 1/16W 2.7K	1	SUPPLIED FROM MBV
R392		ERJ3GSJ101	M.RESISTOR CH 1/16W 100	1	SUPPLIED FROM MBV
R393		ERJ6GEYK225	M.RESISTOR CH 1/10W 2.2M	1	
R394		ERJ3GSJ682	M.RESISTOR CH 1/16W 6.8K	1	SUPPLIED FROM MBV
R716		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R717		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R718		ERJ6GEYJ754	M.RESISTOR CH 1/10W 750K	1	
R719		ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R720		ERJ6GEYJ622	M.RESISTOR CH 1/10W 6.2K	1	
R721		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R723		ERJ6GEYJ183	M.RESISTOR CH 1/10W 18K	1	
R724		ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R725		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R726		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R727		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R728		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R729,30		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	2	
R737		ERJ6GEYJ274	M.RESISTOR CH 1/10W 270K	1	
R738		ERJ6GEYJ334	M.RESISTOR CH 1/10W 330K	1	
R739		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R740		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R741		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R743		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	1	
R744		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R745		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R746		ERDS2TJ181	C.RESISTOR 1/4W 180	1	
R747		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R750		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R757		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R758		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R759		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R763		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R764		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R772		ERJ6GEYJ271	M.RESISTOR CH 1/10W 270	1	
R773		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R774		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R792		ERDS2TJ120	C.RESISTOR 1/4W 12	1	
R801		ERJ3GSJ181	M.RESISTOR CH 1/16W 180	1	SUPPLIED FROM MBV
R802		ERJ3GSJ821	M.RESISTOR CH 1/16W 820	1	SUPPLIED FROM MBV
R804		ERJ3GSJ393	M.RESISTOR CH 1/16W 39K	1	SUPPLIED FROM MBV
R805		ERJ3GSJ392	M.RESISTOR CH 1/16W 3.9K	1	SUPPLIED FROM MBV
R809		ERJ3GSJ101	M.RESISTOR CH 1/16W 100	1	SUPPLIED FROM MBV
R811		ERJ3GSJ821	M.RESISTOR CH 1/16W 820	1	SUPPLIED FROM MBV
R826		ERJ3GSJ122	M.RESISTOR CH 1/16W 1.2K	1	SUPPLIED FROM MBV
R827		ERJ3GSJ271	M.RESISTOR CH 1/16W 270	1	SUPPLIED FROM MBV
R835		ERJ3GSJ103	M.RESISTOR CH 1/16W 10K	1	SUPPLIED FROM MBV
R836		ERJ3GSJ472	M.RESISTOR CH 1/16W 4.7K	1	SUPPLIED FROM MBV
R837		ERJ3GSJ222	M.RESISTOR CH 1/16W 2.2K	1	SUPPLIED FROM MBV
R838		ERJ6GEYF271	M.RESISTOR CH 1/10W 270	1	
R839		ERJ3GSJ183	M.RESISTOR CH 1/16W 18K	1	SUPPLIED FROM MBV
R840		ERJ3GSJ103	M.RESISTOR CH 1/16W 10K	1	SUPPLIED FROM MBV
R843		ERJ3GSJ152	M.RESISTOR CH 1/16W 1.5K	1	SUPPLIED FROM MBV
R853		ERJ3GSJ473	M.RESISTOR CH 1/16W 47K	1	SUPPLIED FROM MBV
R855		ERJ3GSJ473	M.RESISTOR CH 1/16W 47K	1	SUPPLIED FROM MBV
R856		ERJ3GSJ102	M.RESISTOR CH 1/16W 1K	1	SUPPLIED FROM MBV
R2001		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2002		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2003		ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
R2005		ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
R2006,07		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R2013		ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R2014		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R2015		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R2018		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2019		ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R2501		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R2502		ERDS2FJ1R5	C.RESISTOR 1/4W 1.5	1	
R2503-05		ERDS2TJ150	C.RESISTOR 1/4W 15	3	
R2506		ERDS2FJ1R2	C.RESISTOR 1/4W 1.2	1	
R2507		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R2508		EROS2CKG6800	M.RESISTOR 1/4W 680	1	
R2509		ERX12SJR47	M.RESISTOR 1/12W 0.47U	1	
R2510-12		ERDS2TJ560	C.RESISTOR 1/4W 56	3	
R2513		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2514		ERDS1TJ561	C.RESISTOR 1/2W 560	1	
R2515		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2516		ERJ6GMYG432	M.RESISTOR CH 1/10W 4.3K	1	
R2517		ERJ6GMYG473	M.RESISTOR CH 1/10W 47K	1	
R2518		ERJ6GMYG133	M.RESISTOR CH 1/10W 13K	1	
R2519		ERJ6GMYG103	M.RESISTOR CH 1/10W 10K	1	
R2520		ERJ6GMYJ684	M.RESISTOR CH 1/10W 680K	1	
R2521		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R2522		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R2523		ERJ6GMYG821	M.RESISTOR CH 1/10W 820	1	
R2524		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R2525		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R2526		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2528		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2530		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2531		ERJ6GMYG201	M.RESISTOR CH 1/10W 200	1	
R2532,33		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	2	
R2534		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2535,36		ERJ6GMYG223	M.RESISTOR CH 1/10W 22K	2	
R2537		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R2538		ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R2539		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R2540		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R2541		ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
R2542,43		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	2	
R2544		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R2545		ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R3006		ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	1	
R3007		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3010		ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R3011		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R3013		ERJ6GMYJ361	M.RESISTOR CH 1/10W 360	1	
R3014		ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R3015		ERJ6GMYJ821	M.RESISTOR CH 1/10W 820	1	
R3018		ERJ6GMYJ821	M.RESISTOR CH 1/10W 820	1	
R3019		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R3020		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3023		ERJ6GMZOROO	M.RESISTOR 1/10W 0	1	
R3025		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3026		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R3038		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R3040		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R3901		ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	1	
R3902		ERDS2TJ750	C.RESISTOR 1/4W 75	1	
R3903,04		ERJ6GMYG242	M.RESISTOR CH 1/10W 2.4K	2	
R3905		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R3907		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3908,09		ERDS2TJ151	C.RESISTOR 1/4W 150	2	
R3918		ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R3919		ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R3938		ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R3944		ERDS2TJ180	C.RESISTOR 1/4W 18	1	
R3946		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R4002		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4003		ERJ6GMYJ123	M.RESISTOR CH 1/10W 12K	1	
R4004		ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R4005		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4006		ERJ6GMYJ621	M.RESISTOR CH 1/10W 620	1	
R4007		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R4008		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R4009		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R4010		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4011		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4012		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R4013		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4015		ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R4016		ERJ6GMYJ513	M.RESISTOR CH 1/10W 51K	1	
R4017		ERJ6GMYG752	M.RESISTOR CH 1/10W 7.5K	1	
R4018		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4019		ERJ6GMYJ824	M.RESISTOR CH 1/10W 820K	1	
R4020		ERJ6GMYG563	M.RESISTOR CH 1/10W 56K	1	
R4021		ERJ6GMYJ184	M.RESISTOR CH 1/10W 180K	1	
R4023		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4024		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R4025		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R4026		ERJ6GMYG472	M.RESISTOR CH 1/10W 4.7K	1	
R4027		ERJ6GMYJ474	M.RESISTOR CH 1/10W 470K	1	
R4028		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4029,30		ERJ6GMYG223	M.RESISTOR CH 1/10W 22K	2	
R4031		ERJ6GMYG103	M.RESISTOR CH 1/10W 10K	1	
R4032		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4033		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4034		ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R4035		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4040		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R4041		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R4042		ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R4043		ERJ6GMYJ100	M.RESISTOR CH 1/10W 10	1	
R6001,02		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R6003		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R6004,05		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R6006		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R6010		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R6011,12		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	2	
R6013		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R6016		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R6018		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R6021		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6501		ERX1SJ1R8	M.RESISTOR 1W 1.8	1	
R6502		ERJ6GMYG392	M.RESISTOR CH 1/10W 3.9K	1	
R6504		ERJ6GMYG182	M.RESISTOR CH 1/10W 1.8K	1	
R6505		ERJ6GMYG512	M.RESISTOR CH 1/10W 5.1K	1	
R6506		ERJ6GMYG913	M.RESISTOR CH 1/10W 91K	1	
R6508		ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
R6509		ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
R6510-12		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	3	
R6513-15		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	3	
R6516-20		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	5	
R7013		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R7014		ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R7022		ERJ6GMYJ274	M.RESISTOR CH 1/10W 270K	1	
R7023		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R7024		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R7025		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R7026,27		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R7028		ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R7029		ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R7030		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R7031		ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
R7502		ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
R7503		ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
R7504		ERJ6GMYK2R2	M.RESISTOR CH 1/10W 2.2	1	
R7505		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R7506		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R7507,08		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R7509,10		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R7511		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R7512		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R7513		ERJ6GMYJ181	M.RESISTOR CH 1/10W 180	1	
R7515		ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
R7516		ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
R7519,20		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	2	
R7521		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R7523-25		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	3	
R7527		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R7528		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R7530-36		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	7	
R7676		ERG1SJ152	M.RESISTOR 1W 1.5K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
SW7001		ESD142129	SWITCH	1	
T703		EIV5EC013A	TRANSFORMER	1	
T704		EIV5EC006A1	TRANSFORMER	1	
T711		EIS5EC004A	TRANSFORMER	1	
T4001		EIQ7QF014Q	TRANSFORMER	1	
VR301		EVMEASA00B13	V.RESISTOR	1	
VR302		EVMEASA00B14	V.RESISTOR	1	
VR303,04		EVMEASA00B53	V.RESISTOR W	2	
VR305,06		EVMEASA00B14	V.RESISTOR	2	
VR701		EVMEASA00B23	V.RESISTOR	1	
VR751		EVNCBAA00B53	V.RESISTOR	1	
VR2001		EVNDXAA00B54	V.RESISTOR 50K	1	
VR3012		EVNDXAA00B52	V.RESISTOR 500	1	
X710		VLF1035	CRYSTAL OSCILLATOR	1	
X711		VLF0638	CRYSTAL OSCILLATOR	1	
X712		VLF0637	CRYSTAL OSCILLATOR	1	
X716		EFCV4045A4	CRYSTAL OSCILLATOR	1	
X801		VSX0162	CRYSTAL OSCILLATOR	1	
X6001		VSX0479	CRYSTAL OSCILLATOR	1	
X7501		VSX0608	CRYSTAL OSCILLATOR	1	
X7502		VSX0094	CRYSTAL OSCILLATOR	1	
			MISCELLANEOUS		
		VJF1114	FIP HOLDER	1	SUPPLIED FROM MBV
		VJH0724	JACK PLATE	1	SUPPLIED FROM MBV
		VMA6768	EARTH ANGLE	1	
		VSC4025	SHIELD COVER (MAIN)	1	FOR TV DEMOIU. CBA
		VSC3241	SHIELD COVER (TOP)	1	FOR TV DEMOIU. CBA
		ENV578D7H6	TUNER	1	FOR TV DEMOIU. CBA
		VWJ14HW210BB	CABLE (P7501-P6601)	1	
		VWJ0807	CABLE (P2501-P1507)	1	SUPPLIED FROM MBV
		VWJ0808	CABLE (P3001-P501)	1	SUPPLIED FROM MBV
		VWJ0687	CABLE (P6501-P1505)	1	
		VWJ0810	CABLE (P1001-P1102)	1	SUPPLIED FROM MBV
		VEE8794	CABLE (P2502-P202)	1	
		VEE8564	CABLE (P2503-POWER TR.)	1	
		VEE8796	CABLE (P4001-FE HEAD)	1	
	■	VEP06954B	MAIN C.B.A.		(RTL)
					NV-SD25B
					SUPPLIED FROM MBV
C301		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C302		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C303,04		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	2	
C305,06		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	2	
C307		ECUX1H390JCV	C.CAPACITOR CH 50V 39P	1	
C308		ECUX1H680JCV	C.CAPACITOR CH 50V 68P	1	
C309		ECUX1H180JCV	C.CAPACITOR CH 50V 18P	1	
C310		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C311		ECUX1H080DCV	C.CAPACITOR CH 50V 8P	1	
C312		ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1	
C313		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C314		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C315		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C316		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C317		ECEA1EKN4R7	E.CAPACITOR 25V 4.7U	1	
C318		ECEA1HK2R2	E.CAPACITOR 50V 2.2U	1	
C319		ECEA1HK3R3	E.CAPACITOR 50V 3.3U	1	
C320		ECUM1H223KBX	C.CAPACITOR CH 50V 0.022U	1	
C321		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C322		ECUM1H333KBX	C.CAPACITOR CH 50V 0.033U	1	SUPPLIED FRM MBV
C323		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C325		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C326		ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C327		ECEA1CK100	E.CAPACITOR 16V 10U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C328		ECUM1H821JCX	C.CAPACITOR CH 50V 820P	1	SUPPLIED FROM MBV
C329		ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C330		ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C331		ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C332		ECUM1H561JCX	C.CAPACITOR CH 50V 560P	1	SUPPLIED FROM MBV
C333		ECUX1H151JCV	C.CAPACITOR CH 50V 150P	1	
C334		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C336		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C337		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C338,39		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	2	
C340		ECUX1H223ZFV	C.CAPACITOR CH 50V 0.022U	1	
C341		ECUX1H470JCV	C.CAPACITOR CH 50V 47P	1	
C342		ECUX1H820JCV	C.CAPACITOR CH 50V 82P	1	
C381		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C382,83		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	2	
C701		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	1	
C702		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C703		ECEA1HK2R2	E.CAPACITOR 50V 2.2U	1	
C706		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C708		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C710		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C717-20		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	4	
C721		ECEA1HKR27K	E.CAPACITOR 50V 0.27U	1	
C722		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C725		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C728		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C730		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C731		ECEA1CKS100	E.CAPACITOR 16V 10U	1	
C732		ECQV1H224B0	P.CAPACITOR 50V 0.22U	1	
C734		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C735		ECUM1H070DCN	C.CAPACITOR CH 50V 7P	1	
C736		ECQB1H103JH	P.CAPACITOR 50V 0.01U	1	
C737		ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1	
C739		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C740		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C741		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C742		ECUM1H030CCN	C.CAPACITOR CH 50V 3P	1	
C743		ECUM1H270JSN	C.CAPACITOR CH 50V 27P	1	
C744		ECEA1HKR47	E.CAPACITOR 50V 0.47U	1	
C745		ECUM1H680JPN	C.CAPACITOR CH 50V 68P	1	
C746		ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1	
C748		ECEA1CK330	E.CAPACITOR 16V 33U	1	
C749		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C760		ECQV1H563JM	P.CAPACITOR 50V 0.056U	1	
C782		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C801-04		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	4	
C806		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C808		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C813		ECUX1H181JCV	C.CAPACITOR CH 50V 180P	1	
C814		ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1	
C815		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C839		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C840		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C841		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C842		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C843		ECUX1H223ZFV	C.CAPACITOR CH 50V 0.022U	1	
C844		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C845		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C846		ECUX1H390JCV	C.CAPACITOR CH 50V 39P	1	
C847		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C848		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C849		ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1	
C850		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C851		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C853		ECUX1H180JCV	C.CAPACITOR CH 50V 18P	1	
C854		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C856		ECUX1H222KBV	C.CAPACITOR CH 50V 2200P	1	
C857		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C858		ECUX1H822KBV	C.CAPACITOR CH 50V 8200P	1	
C859		ECEA1HKR33	E.CAPACITOR 50V 0.33U	1	
C860		ECUM1H333KBX	C.CAPACITOR CH 50V 0.033U	1	SUPPLIED FROM MBV
C861		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C862		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C869		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C893		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C1001		ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C1002		ECA1EM101	E.CAPACITOR 25V 100U	1	
C1003		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C1004		ECQV1H474JM	P.CAPACITOR 50V 0.47U	1	
C1007		ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C2001		ECEA1AKA220	E.CAPACITOR 10V 22U	1	
C2002		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C2003		ECUM1H392KBN	C.CAPACITOR CH 50V 3900P	1	
C2006		ECQV1H683JM	P.CAPACITOR 50V 0.068U	1	
C2008		ECUM1H472KBN	C.CAPACITOR CH 50V 4700P	1	
C2009		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C2010		ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C2012		ECA0JM221	E.CAPACITOR 6.3V 220U	1	
C2014		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C2015,16		ECEA1HKN3R3	E.CAPACITOR 50V 3.3U	2	
C2017		ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C2018		ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C2019		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C2020		ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C2021		ECEA1AKA220	E.CAPACITOR 10V 22U	1	
C2022		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2023		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C2024		ECUM1H392KBN	C.CAPACITOR CH 50V 3900P	1	
C2025		ECUM1H223ZFN	C.CAPACITOR CH 50V 0.22U	1	
C2026		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C2027		ECUM1C105ZFM	C.CAPACITOR CH 16V 1U	1	
C2501		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C2502		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C2503-05		ECUM1H104KBM	C.CAPACITOR CH 50V 0.1U	3	
C2506		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C2507-09		ECEA1VKN4R7	E.CAPACITOR 35V 4.7U	3	
C2510		ECUM1H473ZFN	C.CAPACITOR CH 50V 0.047U	1	
C2511		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C2512		ECEA1HKAR47	E.CAPACITOR 50V 0.47U	1	
C2513,14		ECEA1CKA101	E.CAPACITOR 16V 100U	2	
C2515-17		ECEA1HKA2R2	E.CAPACITOR 50V 2.2U	3	
C2518-21		ECUM1H333KBN	C.CAPACITOR CH 50V 0.033U	4	
C2523		ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C2524,25		ECEA1CKA470	E.CAPACITOR 16V 47U	2	
C2526		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C2527		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2528,29		ECUM1H333KBN	C.CAPACITOR CH 50V 0.033U	2	
C2530		ECQV1H683JM	P.CAPACITOR 50V 0.068U	1	
C2535		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C2536		ECUM1C474ZFM	C.CAPACITOR CH 16V 0.47U	1	
C2537		ECEA1AKA330	E.CAPACITOR 6.3V 33U	1	
C2538		ECUM1C105ZFM	C.CAPACITOR CH 16V 1U	1	
C2540		ECEA1AKA220	E.CAPACITOR 10V 22U	1	
C2541		ECEA1HKA4R7	E.CAPACITOR 50V 4.7U	1	
C2542		ECUM1E224ZFN	C.CAPACITOR 25V 0.22U	1	
C2543		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3003		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C3011		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3012		ECUM1H681JCN	C.CAPACITOR 50V 680P	1	
C3013		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C3014		ECA0JM471	E.CPAACITOR 6.3V 470U	1	
C3015		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3016		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C3018		ECUM1H121JCN	C.CAPACITOR CH 50V 120P	1	
C3019		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C3020		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3022		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3023		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3025		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3027		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3034		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3901,02		ECEA1CKA100	E.CAPACITOR 16V 10U	2	
C3911		ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C3922		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C4001		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C4002		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4003		ECQB1H822JZ	F.CAPACITOR 50V 8200P	1	
C4004		ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C4005		ECEA1CKA330	E.CAPACITOR 16V 33U	1	
C4006		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C4007		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C4008		ECEA1EKA4R7	E.CAPACITOR 25V 4.7U	1	
C4009		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C4010		ECEA1CKA330	E.CAPACITOR 16V 33U	1	
C4011		ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C4012		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C4013		ECEA16M33	E.CAPACITOR 16V 33U	1	
C4014		ECQP1332J2	P.CAPACITOR 50V 3300P	1	
C4015		ECCD2H181J	C.CAPACITOR 500V 180P	1	
C4016		ECUM1H153KBN	C.CAPACITOR CH 50V 0.015U	1	
C4017,18		ECUM1H471JCN	C.CAPACITOR CH 50V 470P	2	
C4019		ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C4020,21		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C4022		ECQB1H103KF	P.CAPACITOR 50V 0.01U	1	
C4024		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C4025		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C4026		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C4027		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C6001		ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C6002		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C6003		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C6004		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6006,07		ECUM1H271JCN	C.CAPACITOR CH 50V 270P	2	
C6501		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C6502		ECUM1E224ZFN	C.CAPACITOR 25V 0.22U	1	
C6504		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7010		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7011		ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C7012		ECEA1CKA220	E.CAPACITOR 16V 22U	1	
C7021		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7022		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C7501		ECRHA010A54R	V.CAPACITOR	1	
C7502		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7503		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7504		ECA0JM102	E.CAPACITOR 6.3V 1000U	1	
C7505		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C7507		ECEA1HKA100	E.CAPACITOR 50V 10U	1	
C7508		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7510		ECEA1HKAR22	E.CAPACITOR 50V 0.22U	1	
C7513		ECEA0JKS470	E.CAPACITOR 6.3V 47U	1	
C7514		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7515		ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C7517		EECS5R5T224N	E.CAPACITOR 5.5V 0.22U	1	
C7518		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C7519		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C7520		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C7522,23		ECUM1H470JCN	C.CAPACITOR CH 50V 47P	2	
C7661		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C7662		ECQV1H683JM	P.CAPACITOR 50V 0.068U	1	
C7663		ECQV1H823JM	P.CAPACITOR 50V 0.082U	1	
C7664		ECQB1H273JH	P.CAPACITOR 50V 0.027U	1	
C7665,66		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7667		ECEA1HKA100	E.CAPACITOR 50V 10U	1	
C7675		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C7676,77		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7678		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C7679		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C7680		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C7682		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
D310		DA114	DIODE	1	SUPPLIED FROM MBV
D381		DA114	DIODE	1	SUPPLIED FROM MBV
D382		MA143	DIODE	1	
D383		MA141K	DIODE	1	
D710		MA3100L	DIODE	1	
D771		MA151WK	DIODE	1	
D772		1SS254	DIODE	1	
D773		MA151K	DIODE	1	
D2501-05		1SS254	DIODE	5	
D2506		MA723VT	DIODE	1	
D3003,04		1SS254	DIODE	2	
D3901		1SS254	DIODE	1	
D6002,03		1SS254	DIODE	2	
D6501		MA4075-L	DIODE	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
D7501		MA4220	DIODE	1	
D7502		MA151WA	DIODE	1	
D7503,04		MA151A	DIODE	2	
D7505		MA151WA	DIODE	1	
D7506-10		MA151A	DIODE	5	
D7511		MA151K	DIODE	1	
D7513		MA151A	DIODE	1	
D7521		MA723VT	DIODE	1	
D7601		MA151A	DIODE	1	
D7602		MA3082M	DIODE	1	
DL802		EFDBR124A53T	DELAY	1	
DP7501		VSL0311	DISPLAY TUBE	1	
IC301		MSM7403MS	IC	1	
IC302		TDA9715H/A	IC	1	SUPPLIED FROM MBV
IC701		M51366SP	IC	1	SUPPLIED FROM MBV
IC2501		NA3814K	IC	1	
IC2502		XRA6870S	IC	1	
IC2503		LM358PS	IC	1	
IC3901		MM1111XFF	IC	1	
IC4001		LA7285	IC	1	
IC6001		MN67434VRSF	IC	1	
IC6501		XRA6887-V3	IC	1	SUPPLIED FROM MBV
IC7501		MN187164VZAK	IC	1	
IC7502		PST7043	IC	1	
IC7503		M6M80011AP	IC	1	
IC7504		PST7026	IC	1	
IC7652		AN5043	IC	1	
IC7653		BU4066BF	IC	1	
J3901		VJS3544	CONNECTOR (FEMALE)	1	SUPPLIED FROM MBV
L301		VLQEL05S330K	COIL 33UH	1	
L302,03		VLQEL05S390K	COIL 39UH	2	
L304		VLQEL05S101K	COIL 100UH	1	
L306		VLQEL05S820J	COIL 82UH	1	
L307		VLQEL05S101K	COIL 100UH	1	
L308		VLQEL05S390K	COIL 39UH	1	
L701		ELESQ680KA	COIL 68UH	1	
L713,14		VLQ0305J1R2	COIL 1.2UH	2	
L717,18		ELESQ680KA	COIL 68UH	2	
L719		VLQEL05F8R2K	COIL 8.2UH	1	
L720		ELESQ680KA	COIL 68UH	1	
L802		VLQEL05S101K	COIL 100UH	1	
L803		VLQEL05S270K	COIL 27UH	1	
L805		VLQEL05S150K	COIL 15UH	1	
L808		VLQEL05S6R8J	COIL 6.8UH	1	
L809-11		VLQEL05S101K	COIL 100UH	3	
L2001		ELESE101KA	COIL 100UH	1	
L2501		ELESE101KA	COIL 100UH	1	
L2503		VLP0125	COIL	1	
L3003		ELESN120KA	COIL H	1	
L3004,05		ELESE101KA	COIL 100UH	2	
L3007		ELESN6R8JA	COIL	1	
L3008,09		ELESE101KA	COIL 100UH	2	
L4001		VLQEL07F153J	COIL 15MH	1	
L4002		ELESE471KA	COIL	1	
L4003		VLQ0188J101	COIL 100UH	1	
L6001		VLP0074	COIL	1	
L6501		VLP0074	COIL	1	
L7001,02		ELESE101KA	COIL 100UH	2	
L7003		ELESE1R0KA	COIL	1	
L7004,05		ELESE101KA	COIL 100UH	2	
L7006		ELESE1R0KA	COIL	1	
L7020		ELESE470KA	COIL H	1	
L7501		VLQ0188J151	COIL 150UH	1	
L7502		ELESE101KA	COIL 100UH	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
P1001		VJS3537A013G	CONNECTOR (FEMALE) 13P	1	
P2501		VJS3537A015G	CONNECTOR (FEMALE) 15P	1	
P2502		VJP1237T	CONNECTOR (MALE) 10P	1	
P2503		VJP3483	CONNECTOR (MALE)	1	SUPPLIED FROM MBV
P3001		VJS3537A010G	CONNECTOR (FEMALE) 10P	1	
P4001		VJP1229T	CONNECTOR (MALE) 2P	1	
P4002		VJS2331	CONNECTOR (FEMALE)	1	
P6501		VJS3537A013G	CONNECTOR (FEMALE) 13P	1	
P7501		VJS3537A014G	CONNECTOR (FEMALE) 14P	1	
PP6707		VJP3043A010W	CONNECTOR (MALE) 10P	1	
PP7001-03		VJP3043A005W	CONNECTOR (MALE) 5P	3	
PP7004		VJP3043A006W	CONNECTOR (MALE) 6P	1	
PP7005		VJP3043A005W	CONNECTOR (MALE) 5P	1	
PS301		VJR0800	CONNECTOR	1	SUPPLIED FROM MBV
PS701-03		VJS3043B005W	CONNECTOR (FEMALE) 5P	3	
PS704		VJS3043B006W	CONNECTOR (FEMALE) 6P	1	
Q301		2SC3930	TRANSISTOR	1	
Q391		2SB1218A	TRANSISTOR	1	
Q703		MSD601-S	TRANSISTOR	1	
Q712		2SC1317	TRANSISTOR	1	
Q713		2SD1328-S	TRANSISTOR	1	
Q771,72		MSD601-S	TRANSISTOR	2	
Q804		2SC3930	TRANSISTOR	1	
Q2502		2SB1321-R	TRANSISTOR	1	
Q2503		2SD1991A	TRANSISTOR	1	
Q2504		MSB709	TRANSISTOR	1	
Q2505,06		2SD1991A	TRANSISTOR	2	
Q3001		MSB709	TRANSISTOR	1	
Q3002		MSC2295	TRANSISTOR	1	
Q3906		2SB1320	TRANSISTOR	1	
Q4001		MSD602-R	TRANSISTOR	1	
Q4002		2SD601A	TRANSISTOR	1	
Q4003		MSB709	TRANSISTOR	1	
Q4004		MSB710-R	TRANSISTOR	1	
Q7020-23		MSD601-R	TRANSISTOR	4	
QR701,02		MRN1404	TRANSISTOR-RESISTOR	2	
QR713		MRN1402	TRANSISTOR-RESISTOR	1	
QR807		DTC144EU	TRANSISTOR-RESISTOR	1	
QR1001		MRN1402	TRANSISTOR-RESISTOR	1	
QR2001		XN1213	TRANSISTOR-TRANSISTOR	1	
QR3001,02		MRN2402	TRANSISTOR-RESISTOR	2	
QR3903		MRN1404	TRANSISTOR-RESISTOR	1	
QR4002		MRN1404	TRANSISTOR-RESISTOR	1	
QR4003		MRN2404	TRANSISTOR-RESISTOR	1	
QR4004		MRN1404	TRANSISTOR-RESISTOR	1	
QR6501		XN1211	TRANSISTOR-RESISTOR	1	
QR7501		MRN1404	TRANSISTOR-RESISTOR	1	
QR7601		MRN1404	TRANSISTOR-RESISTOR	1	
R305,06		ERJ3GSJ103	M.RESISTOR CH 1/16W 10K	2	SUPPLIED FROM MBV
R307		ERJ3GSJ272	M.RESISTOR CH 1/16W 2.7K	1	SUPPLIED FROM MBV
R308,09		ERJ3GSJ103	M.RESISTOR CH 1/16W 10K	2	SUPPLIED FROM MBV
R310		ERJ6GEYJ125	M.RESISTOR CH 1/10W 1.2M	1	
R311		ERJ3GSJ224	M.RESISTOR CH 1/16W 220K	1	SUPPLIED FROM MBV
R319		ERJ3GSJ221	M.RESISTOR CH 1/16W 220	1	SUPPLIED FROM MBV
R320		ERJ3GSJ102	M.RESISTOR CH 1/16W 1K	1	SUPPLIED FROM MBV
R321		ERJ3GSJ272	M.RESISTOR CH 1/16W 2.7K	1	SUPPLIED FROM MBV
R322		ERJ3GSJ822	M.RESISTOR CH 1/16W 8.2K	1	SUPPLIED FROM MBV
R325		ERJ3GSJ332	M.RESISTOR CH 1/16W 3.3K	1	SUPPLIED FROM MBV
R328		ERJ3GSJ102	M.RESISTOR CH 1/16W 1K	1	SUPPLIED FROM MBV
R329		ERJ3GSJ393	M.RESISTOR CH 1/16W 39K	1	SUPPLIED FROM MBV
R331,32		ERJ3GSJ103	M.RESISTOR CH 1/16W 10K	2	SUPPLIED FROM MBV
R333		ERJ3GSJ471	M.RESISTOR CH 1/16W 470	1	SUPPLIED FROM MBV
R334,35		ERJ3GSJ152	M.RESISTOR CH 1/16W 1.5K	2	SUPPLIED FROM MBV
R337		ERJ3GSJ103	M.RESISTOR CH 1/16W 10K	1	SUPPLIED FROM MBV

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R338		ERJ3GSJ472	M.RESISTOR CH 1/16W 4.7K	1	SUPPLIED FROM MBV
R380		ERJ3GSJ473	M.RESISTOR CH 1/16W 47K	1	SUPPLIED FROM MBV
R382		ERJ3GSJ392	M.RESISTOR CH 1/16W 3.9K	1	SUPPLIED FROM MBV
R391		ERJ3GSJ272	M.RESISTOR CH 1/16W 2.7K	1	SUPPLIED FROM MBV
R392		ERJ3GSJ101	M.RESISTOR CH 1/16W 100	1	SUPPLIED FROM MBV
R393		ERJ6GEYK225	M.RESISTOR CH 1/10W 2.2M	1	
R394		ERJ3GSJ682	M.RESISTOR CH 1/16W 6.8K	1	SUPPLIED FROM MBV
R716		ERJ6GEYJ272	M.RESISTOR CH 1/10W 6.8K	1	
R717		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R718		ERJ6GEYJ754	M.RESISTOR CH 1/10W 750K	1	
R719		ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R720		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R721		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R723		ERJ6GEYJ183	M.RESISTOR CH 1/10W 18K	1	
R724		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R725		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R726		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R727		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R728		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R729,30		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	2	
R737		ERJ6GEYJ274	M.RESISTOR CH 1/10W 270K	1	
R738		ERJ6GEYJ334	M.RESISTOR CH 1/10W 330K	1	
R739		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R740		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R743		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	1	
R744		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R745		ERJ6GEYG181	M.RESISTOR CH 1/10W 180	1	
R746		ERDS2TJ181	C.RESISTOR 1/4W 180	1	
R747		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R750		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R751		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R756		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R757,58		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R763		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R764		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R772		ERJ6GEYJ271	M.RESISTOR CH 1/10W 270	1	
R773		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R774		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R792		ERDS2TJ120	C.RESISTOR 1/4W 12	1	
R795		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R801		ERJ3GSJ181	M.RESISTOR CH 1/16W 180	1	SUPPLIED FROM MBV
R802		ERJ3GSJ821	M.RESISTOR CH 1/16W 820	1	SUPPLIED FROM MBV
R804		ERJ3GSJ393	M.RESISTOR CH 1/16W 39K	1	SUPPLIED FROM MBV
R805		ERJ3GSJ392	M.RESISTOR CH 1/16W 3.9K	1	SUPPLIED FROM MBV
R809		ERJ3GSJ101	M.RESISTOR CH 1/16W 100	1	SUPPLIED FROM MBV
R811		ERJ3GSJ821	M.RESISTOR CH 1/16W 820	1	SUPPLIED FROM MBV
R826		ERJ3GSJ122	M.RESISTOR CH 1/16W 1.2K	1	SUPPLIED FROM MBV
R827		ERJ3GSJ271	M.RESISTOR CH 1/16W 270	1	SUPPLIED FROM MBV
R835		ERJ3GSJ103	M.RESISTOR CH 1/16W 10K	1	SUPPLIED FROM MBV
R836		ERJ3GSJ472	M.RESISTOR CH 1/16W 4.7K	1	SUPPLIED FROM MBV
R837		ERJ3GSJ222	M.RESISTOR CH 1/16W 2.2K	1	SUPPLIED FROM MBV
R838		ERJ6GEYF271	M.RESISTOR CH 1/10W 270	1	
R839		ERJ3GSJ183	M.RESISTOR CH 1/16W 18K	1	SUPPLIED FROM MBV
R840		ERJ3GSJ103	M.RESISTOR CH 1/16W 10K	1	SUPPLIED FROM MBV
R843		ERJ3GSJ152	M.RESISTOR CH 1/16W 1.5K	1	SUPPLIED FROM MBV
R853		ERJ3GSJ473	M.RESISTOR CH 1/16W 47K	1	SUPPLIED FROM MBV
R855		ERJ3GSJ473	M.RESISTOR CH 1/16W 47K	1	SUPPLIED FROM MBV
R856		ERJ3GSJ102	M.RESISTOR CH 1/16W 1K	1	SUPPLIED FROM MBV
R2001		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2002		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2003		ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
R2005		ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
R2006,07		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R2013		ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R2014		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R2015		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R2018		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2019		ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R2501		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R2502		ERDS2FJ1R5	C.RESISTOR 1/4W 1.5	1	
R2503-05		ERDS2TJ150	C.RESISTOR 1/4W 15	3	
R2506		ERDS2FJ1R2	C.RESISTOR 1/4W 1.2	1	
R2507		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R2508		EROS2CKG6800	M.RESISTOR 1/4W 680	1	
R2509		ERX12SJR47	M.RESISTOR 1/12W 0.47U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R2510-12		ERDS2TJ560	C.RESISTOR 1/4W 56	3	
R2513		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2514		ERDS1TJ561	C.RESISTOR 1/2W 560	1	
R2515		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2516		ERJ6GMYG432	M.RESISTOR CH 1/10W 4.3K	1	
R2517		ERJ6GMYG473	M.RESISTOR CH 1/10W 47K	1	
R2518		ERJ6GMYG133	M.RESISTOR CH 1/10W 13K	1	
R2519		ERJ6GMYG103	M.RESISTOR CH 1/10W 10K	1	
R2520		ERJ6GMYJ684	M.RESISTOR CH 1/10W 680K	1	
R2521		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R2522		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R2523		ERJ6GMYG821	M.RESISTOR CH 1/10W 820	1	
R2524		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R2525		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R2526		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2528		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2530		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2531		ERJ6GMYG201	M.RESISTOR CH 1/10W 200	1	
R2532,33		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	2	
R2534		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2535,36		ERJ6GMYG223	M.RESISTOR CH 1/10W 22K	2	
R2537		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R2538		ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R2539		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R2540		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R2541		ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
R2542,43		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	2	
R2544		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R2545		ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R3006		ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	1	
R3007		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3010		ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R3011		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R3013		ERJ6GMYJ361	M.RESISTOR CH 1/10W 360	1	
R3014		ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R3015		ERJ6GMYJ821	M.RESISTOR CH 1/10W 820	1	
R3018		ERJ6GMYJ821	M.RESISTOR CH 1/10W 820	1	
R3019		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R3020		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3023		ERJ6GMZ0R00	M.RESISTOR 1/10W 0	1	
R3025		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3026		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R3038		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R3040		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R3901		ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	1	
R3902		ERDS2TJ750	C.RESISTOR 1/4W 75	1	
R3903,04		ERJ6GMYG242	M.RESISTOR CH 1/10W 2.4K	2	
R3905		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R3907		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3908,09		ERDS2TJ151	C.RESISTOR 1/4W 150	2	
R3918		ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R3919		ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R3938		ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R3944		ERDS2TJ180	C.RESISTOR 1/4W 18	1	
R3946		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R4002		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4003		ERJ6GMYJ123	M.RESISTOR CH 1/10W 12K	1	
R4004		ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R4005		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4006		ERJ6GMYJ621	M.RESISTOR CH 1/10W 620	1	
R4007		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R4008		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R4009		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R4010		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4011		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4012		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R4013		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4015		ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R4016		ERJ6GMYJ513	M.RESISTOR CH 1/10W 51K	1	
R4017		ERJ6GMYG752	M.RESISTOR CH 1/10W 7.5K	1	
R4018		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4019		ERJ6GMYJ824	M.RESISTOR CH 1/10W 820K	1	
R4020		ERJ6GMYG563	M.RESISTOR CH 1/10W 56K	1	
R4021		ERJ6GMYJ184	M.RESISTOR CH 1/10W 180K	1	
R4023		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R4024		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R4025		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R4026		ERJ6GMYG472	M.RESISTOR CH 1/10W 4.7K	1	
R4027		ERJ6GMYJ474	M.RESISTOR CH 1/10W 470K	1	
R4028		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4029,30		ERJ6GMYG223	M.RESISTOR CH 1/10W 22K	2	
R4031		ERJ6GMYG103	M.RESISTOR CH 1/10W 10K	1	
R4032		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4033		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4034		ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R4035		ERJ6GMYJ227	M.RESISTOR CH 1/10W 2.2K	1	
R4040		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R4041		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R4042		ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R4043		ERJ6GMYJ100	M.RESISTOR CH 1/10W 10	1	
R6001,02		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R6003		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R6004,05		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R6006		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R6010		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R6011,12		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	2	
R6013		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R6016		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R6018		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R6021		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6501		ERX1SJ1R8	M.RESISTOR 1W 1.8	1	
R6502		ERJ6GMYG392	M.RESISTOR CH 1/10W 3.9K	1	
R6504		ERJ6GMYG182	M.RESISTOR CH 1/10W 1.8K	1	
R6505		ERJ6GMYG512	M.RESISTOR CH 1/10W 5.1K	1	
R6506		ERJ6GMYG913	M.RESISTOR CH 1/10W 91K	1	
R6508		ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
R6509		ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
R6510-12		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	3	
R6513-15		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	3	
R6516-20		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	5	
R7013		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R7014		ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R7022		ERJ6GMYJ274	M.RESISTOR CH 1/10W 270K	1	
R7023		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R7024		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R7025		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R7026,27		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R7028		ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R7029		ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R7030		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R7031		ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
R7502		ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
R7503		ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
R7504		ERJ6GMYK2R2	M.RESISTOR CH 1/10W 2.2	1	
R7505		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R7506		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R7507,08		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R7509,10		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R7511		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R7512		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R7513		ERJ6GMYJ181	M.RESISTOR CH 1/10W 180	1	
R7515		ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
R7516		ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
R7519,20		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	2	
R7521		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R7522-25		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	4	
R7527		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R7528-31		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	4	
R7534-36		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	3	
R7671,72		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	2	
R7673		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R7674		ERJ6GEYF124	M.RESISTOR CH 1/10W 120K	1	
R7675		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R7676		ERG1SJ152	M.RESISTOR 1W 1.5K	1	
R7677		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R7678		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R7679		ERDS2TJ100	C.RESISTOR 1/4W 10	1	
R7680		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R7681,82		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	2	
R7683		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R7684		ERJ6GEYJ393	M.RESISTOR CH 1/10W 39K	1	
R7691		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R7694		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R7695		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R7696		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
SW7001		ESD142129	SWITCH	1	
T703		EIV5EC005A	TRANSFORMER	1	
T704		EIV5EC007A	TRANSFORMER	1	
T711		EIS5EC008A	TRANSFORMER	1	
T4001		EIQ7QF014Q	TRANSFORMER	1	
VR301		EVMEASA00B13	V.RESISTOR	1	
VR302		EVMEASA00B14	V.RESISTOR	1	
VR303,04		EVMEASA00B53	V.RESISTOR	2	
VR305,06		EVMEASA00B14	V.RESISTOR	2	
VR701		EVNCBAA00B23	V.RESISTOR	1	
VR751		EVNCBAA00B53	V.RESISTOR	1	
VR2001		EVNDXAA00B54	V.RESISTOR 50K	1	
VR3012		EVNDXAA00B52	V.RESISTOR 500	1	
X710		EFCH39MGP1	CRYSTAL OSCILLATOR	1	
X711		EFCS6M65MW3B	CRYSTAL OSCILLATOR	1	
X712		EFCS6R0MS5	CRYSTAL OSCILLATOR	1	
X801		VSX0162	CRYSTAL OSCILLATOR	1	
X6001		VSX0479	CRYSTAL OSCILLATOR	1	
X7501		VSX0608	CRYSTAL OSCILLATOR	1	
X7502		VSX0094	CRYSTAL OSCILLATOR	1	
			MISCELLANEOUS		
		VJF1114	FIP HOLDER	1	SUPPLIED FROM MBV
		VJH0729	JACK PLATE	1	SUPPLIED FROM MBV
		VMA6768	EARTH ANGLE	1	
		ENV87837H3R	TUNER	1	FOR TV DEMODU. C.B.A.
		VSC4025	SHIELD COVER (MAIN)	1	FOR TV DEMODU. C.B.A.
		VSC3241	SHIELD COVER (TOP)	1	FOR TV DEMODU. C.B.A.
		VWJ14HW210BB	CABLE (P7501-P6601)	1	
		VWJ0807	CABLE (P2501-P1507)	1	SUPPLIED FROM MBV
		VWJ0808	CABLE (P3001-P501)	1	SUPPLIED FROM MBV
		VWJ0687	CABLE (P6501-P1505)	1	
		VWJ0810	CABLE (P1001-P1102)	1	SUPPLIED FROM MBV
		VEE8794	CABLE (P2502-P202)	1	
		VEE8564	CABLE (P2503-POWER TR.)	1	
		VEE8796	CABLE (P4001-FE HEAD)	1	
	■	VEP05200A	HEAD AMP C.B.A.		(RTL)
					SUPPLIED FROM MBV
C503		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C505		ECUM1H181JCN	C.CAPACITOR CH 50V 180P	1	
C508		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C509		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C510		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C511		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C512		ECUM1H080DCN	C.CAPACITOR CH 50V 8OP	1	
C513		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C518		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C519		ECUM1C105ZFM	C.CAPACITOR CH 16V 1U	1	
C520		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C528		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C536,37		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C543		ECUM1H223ZFN	C.CAPACITOR CH 50V 0.022U	1	
C550-52		ECUM1H223ZFN	C.CAPACITOR CH 50V 0.022U	3	
D502,03		1SS254	DIODE	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
IC501		STV5715	IC	1	SUPPLIED FROM MBV
L501		ELESN820KA	COIL H	1	
L506		ELESE151K	COIL 150UH	1	
L508		ELESE101KA	COIL 100UH	1	
L509		ELESE270KA	COIL H	1	
P501		VJS1680	CONNECTOR	1	
PS002		VJS3069	CONNECTOR (FEMALE)	1	
Q502		2SB709	TRANSISTOR	1	
Q503		2SC2295	TRANSISTOR	1	
Q504		2SB709	TRANSISTOR	1	
R505		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R507		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R509		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R510		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R512		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R513		ERJ6GEYJ391	M.RESISTOR CH 1/10W 390	1	
R514,15		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	2	
R516		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R517		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R519		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R524		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R526		ERJ6GEYJ100	M.RESISTOR CH 1/10W 10	1	
R527		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R528		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R529		ERJ6GEYJ100	M.RESISTOR CH 1/10W 10	1	
R533		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R535		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R537		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R541		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R550		ERJ6GEYJ180	M.RESISTOR CH 1/10W 18	1	
R551		ERJ6GEYJ271	M.RESISTOR CH 1/10W 270	1	
R552		ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	1	
VR501		EVNDCAA03B23	V.RESISTOR	1	
VR502		EVNDCAA03B13	V.RESISTOR	1	
			MISCELLANEOUS		
		VSC3770	SHIELD COVER (BOTTOM)	1	
		VSC3768	SHIELD COVER (TOP)	1	
		VSC3769	SHIELD COVER (MAIN)	1	
	■	VEP07761A	OPERATION C.B.A.		(RTL.)
					NV-SD22EG, SD25EG
					SUPPLIED FROM MBV
IR6601		VEK6407	IR RECEIVER UNIT	1	
P6601		VJS3537A014G	CONNECTOR (FEMALE) 14P	1	
SW6602-17		EVQ11409K	SWITCH	16	
	■	VEP07761B	OPERATION C.B.A.		(RTL.)
					NV-SD22EO, SD25B/EO
					SUPPLIED FROM MBV
IR6601		VEK6407	IR RECEIVER UNIT	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
P6601		VJS3537A014G	CONNECTOR (FEMALE) 14P	1	
SW6602-16		EVQ11409K	SWITCH	15	
	■	VEP01583B	POWER C.B.A.		(RTL)<!>
					NV-SD22EG,SD25EG
					SUPPLIED FROM MBV
C1101		VCC0022	CAPACITOR	1	<!>
C1106		VCC0022	CAPACITOR	1	<!>
C1107,08		VCF2AAD104M	CAPACITOR	2	<!>SUPPLIED FROM MBV
C1109		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C1110		ECKF1H391KB	E.CAPACITOR 50V 390P	1	
C1111		ECA1CGE101	E.CAPACITOR 16V 100U	1	
C1114		VCC0022	CAPACITOR	1	<!>
C1115		ECEC2GG330	E.CAPACITOR 400V 33P	1	
C1116		ECKD2H102KB	C.CAPACITOR 500V 1000P	1	
C1117		ECKD2H103PU	C.CAPACITOR 500V 0.01U	1	
C1118		ECEA1JFE470	E.CAPACITOR 63V 47U	1	
C1119		ECKD2H271KB	C.CAPACITOR 500V 270P	1	
C1120		ECEA1DFZ681	E.CAPACITOR 20V 680U	1	
C1121		ECEA1DFZ331	E.CAPACITOR 20V 330U	1	
C1122		ECEA1VFE820	E.CAPACITOR 35V 82U	1	
C1123		ECEA1DFZ331	E.CAPACITOR 20V 330U	1	
C1124,25		ECEA1AFZ331X	E.CAPACITOR 10V 330U	2	
C1126		ECQV1H823JM	P.CAPACITOR 50V 0.082U	1	
C1127		ECKF1H102ZF	C.CAPACITOR 50V 1000P	1	
C1128		ECA1CGE101	E.CAPACITOR 16V 100U	1	
C1129		ECCD3A470KGE	C.CAPACITOR 1kV 47P	1	
C1130		ECQB1H332JF	P.CAPACITOR 50V 3300P	1	
C1131		ECKD2H271KB	C.CAPACITOR 500V 270P	1	
C1133		ECKF1H102ZF	C.CAPACITOR 50V 1000P	1	
C1134,35		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C1136		ECEA1HGE470	E.CAPACITOR 50V 47U	1	
C1137		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C1138		ECKF1H102ZF	C.CAPACITOR 50V 1000P	1	
C1139		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C1140		ECQV1H224JM	P.CAPACITOR 50V 0.22U	1	
D1101		S1WBA60S	DIODE	1	<!>
D1106		1N4148S	DIODE	1	SUPPLIED FROM MBV
D1107		AP01C	DIODE	1	
D1109		AU01Z	DIODE	1	
D1110		RL2Z	DIODE	1	
D1111		MA185	DIODE	1	
D1112,13		11EQS04	DIODE	2	
D1114,15		MA178	DIODE	2	
D1116		ENB461D-05A	SURGE ABSORBER 460V	1	<!>
D1118		MA178	DIODE	1	
IC1101		HA17431PA	IC	1	SUPPLIED FROM MBV
IC1102		TDA4605-3	IC	1	SUPPLIED FROM MBV
L1107		ELF18D222F	COIL	1	<!>SUPPLIED FROM MBV
L1108		VLQ0410	COIL	1	
L1109		ELELN220KA	COIL H	1	
L1110		ELESE101KA	COIL 100UH	1	
L1114		EXCELSA35	COIL	1	
P1101		VJS2625	CONNECTOR (FEMALE)	1	<!>
P1102		VJS1683	CONNECTOR (FEMALE)	1	
Q1101		STP3N60	TRANSISTOR	1	<!>SUPPLIED FROM MBV
Q1103		PS2561L1V1WL	TRANSISTOR	1	<!>
Q1105		2SD1991	TRANSISTOR	1	
Q1106		2SD2375	TRANSISTOR	1	
Q1107		2SD1991	TRANSISTOR	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
QR1101		DTA114YL	TRANSISTOR-RESISTOR	1	SUPPLIED FROM MBV
R1102-04		ERDS2TJ273	C.RESISTOR 1/4W 27K	3	
R1105		ERDS2TJ184	C.RESISTOR 1/4W 180K	1	
R1106		ERDS2TJ221	C.RESISTOR 1/4W 220	1	
R1107		ERDS2TJ302	C.RESISTOR 1/4W 3K	1	
R1108		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R1111,12		EROS2CKG2701	M.RESISTOR 1/4W 2.7K	2	
R1113		ERDS2TJ273	C.RESISTOR 1/4W 27K	1	
R1114		ERDS1TJ472	C.RESISTOR 1/2W 4.7K	1	
R1115		ERDS2TJ824	C.RESISTOR 1/4W 820K	1	
R1117		ERX12SJR51	M.RESISTOR 1/2W 0.51	1	SUPPLIED FROM MBV
R1118		EROS2CKG2701	M.RESISTOR 1/4W 2.7K	1	
R1119		EROS2CKG2401	M.RESISTOR 1/4W 2.4K	1	
R1120		ERDS2TJ564	C.RESISTOR 1/4W 560K	1	
R1121		ERDS2TJ824	C.RESISTOR 1/4W 820K	1	
R1122		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R1124		ERDS2TJ100	C.RESISTOR 1/4W 10	1	
R1126		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R1128		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R1129,30		ERG1SJ273	M.RESISTOR 1W 27K	2	
T1101		VLT0721	TRANSFORMER	1	<!>
					SUPPLIED FROM MBV
	■	VEP01583A	POWER C.B.A.		(RTL)<!>
					NV-SD22E0,SD25B/E0
					SUPPLIED FROM MBV
C1101		VCC0022	CAPACITOR	1	<!>
C1106		VCC0022	CAPACITOR	1	<!>
C1107,08		VCF2AAD104M	C.CAPACITOR 100V 0.1U	2	<!>SUPPLIED FROM MBV
C1109		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C1110		ECKF1H391KB	E.CAPACITOR 50V 390P	1	
C1111		ECA1CGE101	E.CAPACITOR 16V 100U	1	
C1114		VCC0022	CAPACITOR	1	<!>
C1115		ECEC2GG330	E.CAPACITOR 400V 33P	1	
C1116		ECKD2H102KB	C.CAPACITOR 500V 1000P	1	
C1117		ECKD2H103PU	C.CAPACITOR 500V 0.1U	1	
C1118		ECEA1JFE470	E.CAPACITOR 63V 47U	1	
C1119		ECKD2H271KB	C.CAPACITOR 500V 270P	1	
C1120		ECEA1DFZ681	E.CAPACITOR 20V 680U	1	
C1121		ECEA1DFZ331	E.CAPACITOR 20V 330U	1	
C1122		ECEA1VFE820	E.CAPACITOR 35V 82U	1	
C1123		ECEA1DFZ331	E.CAPACITOR 20V 330U	1	
C1124,25		ECEA1AFZ331X	E.CAPACITOR 10V 330U	2	
C1126		ECQV1H823JM	P.CAPACITOR 50V 0.082U	1	
C1127		ECKF1H102ZF	C.CAPACITOR 50V 1000P	1	
C1128		ECA1CGE101	E.CAPACITOR 16V 100U	1	
C1129		ECCD3A470KGE	C.CAPACITOR 1kV 47P	1	
C1130		ECQB1H332JF	P.CAPACITOR 50V 3300P	1	
C1131		ECKD2H271KB	C.CAPACITOR 500V 270P	1	
C1133		ECKF1H102ZF	C.CAPACITOR 50V 1000P	1	
C1134,35		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C1136		ECEA1HGE470	E.CAPACITOR 50V 47U	1	
C1137		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C1138		ECKF1H102ZF	C.CAPACITOR 50V 1000P	1	
C1139		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C1140		ECQV1H224JM	P.CAPACITOR 50V 0.22U	1	
D1101		S1WBA60S	DIODE	1	<!>
D1106		1N4148S	DIODE	1	SUPPLIED FROM MBV
D1107		AP01C	DIODE	1	
D1109		AU01Z	DIODE	1	
D1110		RL2Z	DIODE	1	
D1111		MA185	DIODE	1	
D1112,13		11EQS04	DIODE	2	
D1114,15		MA178	DIODE	2	
D1116		ENB461D-05A	SURGE ABSORBER 460V	1	<!>
D1118		MA178	DIODE	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
IC1101		HA17431PA	IC	1	SUPPLIED FROM MBV
IC1102		TDA4605-3	IC	1	SUPPLIED FROM MBV
L1107		ELF18D222F	COIL	1	<!>SUPPLIED FROM MBV
L1108		VLQ0410	COIL	1	
L1109		ELELN220KA	COIL	1	
L1110		ELESE101KA	COIL 100UH	1	
L1114		EXCELSA35	COIL	1	
P1101		VJS2625	CONNECTOR (FEMALE)	1	<!>
P1102		VJS1683	CONNECTOR (FEMALE)	1	
Q1101		STP3N60	TRANSISTOR	1	<!>SUPPLIED FROM MBV
Q1103		PS2561L1V1WL	TRANSISTOR	1	<!>
Q1105		2SD1991	TRANSISTOR	1	
Q1106		2SD2375	TRANSISTOR	1	
Q1107		2SD1991	TRANSISTOR	1	
QR1101		DTA114YL	TRANSISTOR-RESISTOR	1	SUPPLIED FROM MBV
R1102-04		ERDS2TJ273	C.RESISTOR 1/4W 27K	3	
R1105		ERDS2TJ184	C.RESISTOR 1/4W 180K	1	
R1106		ERDS2TJ221	C.RESISTOR 1/4W 220	1	
R1107		ERDS2TJ302	C.RESISTOR 1/4W 3K	1	
R1108		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R1111,12		EROS2CKG2701	M.RESISTOR 1/4W 2.7K	2	
R1113		ERDS2TJ273	C.RESISTOR 1/4W 27K	1	
R1114		ERDS1TJ472	C.RESISTOR 1/2W 4.7K	1	
R1115		ERDS2TJ824	C.RESISTOR 1/4W 820K	1	
R1117		ERX12SJR51	M.RESISTOR 1/2W 0.51	1	SUPPLIED FROM MBV
R1118		EROS2CKG2701	M.RESISTOR 1/4W 2.7K	1	
R1119		EROS2CKG2401	M.RESISTOR 1/4W 2.4K	1	
R1120		ERDS2TJ564	C.RESISTOR 1/4W 560K	1	
R1121		ERDS2TJ824	C.RESISTOR 1/4W 820K	1	
R1122		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R1124		ERDS2TJ100	C.RESISTOR 1/4W 10	1	
R1126		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R1128		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R1129,30		ERG1SJ273	M.RESISTOR 1W 27K	2	
T1101		VLT0723	TRANSFORMER	1	<!>
					SUPPLIED FROM MBV
	■	----------	MECHANISM CON..ECTON C.B.A.		
D1501		LN59L.VT	IC	1	
IC1501,02		ON1387	DIODE	2	
P1503		VJS3316A002	CONNECTOR (FEMALE) 2P	1	
P1504		VJS3317A004	CONNECTOR (FEMALE) 4P	1	
P1505		VJS3537B013G	CONNECTOR (FEMALE) 13P	1	
Q1501,02		PN205L-NC.VT	TRANSISTOR	2	
SW1501		VES0695	SWITCH	1	
			MISCELLANEOUS		
		VMD2029	REEL GUIDE	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
	■	----------	MOTOR C.B.A.		
			MISCELLANEOUS		
		VJP3316B002	CONNECTOR (MALE) 2P	1	

SECTION 5

OPTION (FOR NV-SD22EO,SD25EO/B)

5-1. DISASSEMBLY FLOW CHART FOR CABINET PARTS AND CIRCUIT BOARDS

(1) Disconnect the video recoder from the AC outlet.

(2) Unscrew the 4 screws of the cabinet cover and remove the cabinet cover. (Fig. V1)

(3) Unscrew the 2 screws on the back of the unit and the 3 screws on the upper side of the Main C.B.A.. (Fig. V2)

(4) Unlock the Tab on the upper side of the Main C.B.A.. (Fig. V2)

(5) Turn the Main C.B.A. up side down and lay it on the Cassette Compartment.
Insert the PDC Decoder Pack and solder it. (Fig. V3)

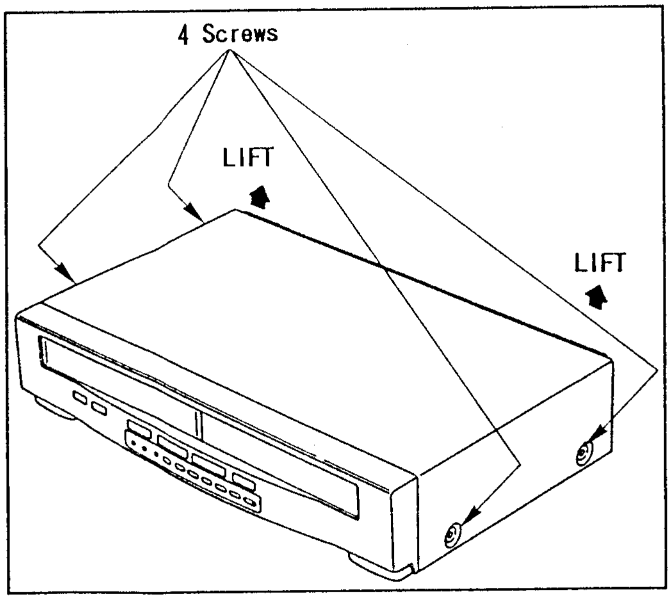

4 Screws
LIFT
LIFT

Fig. V1

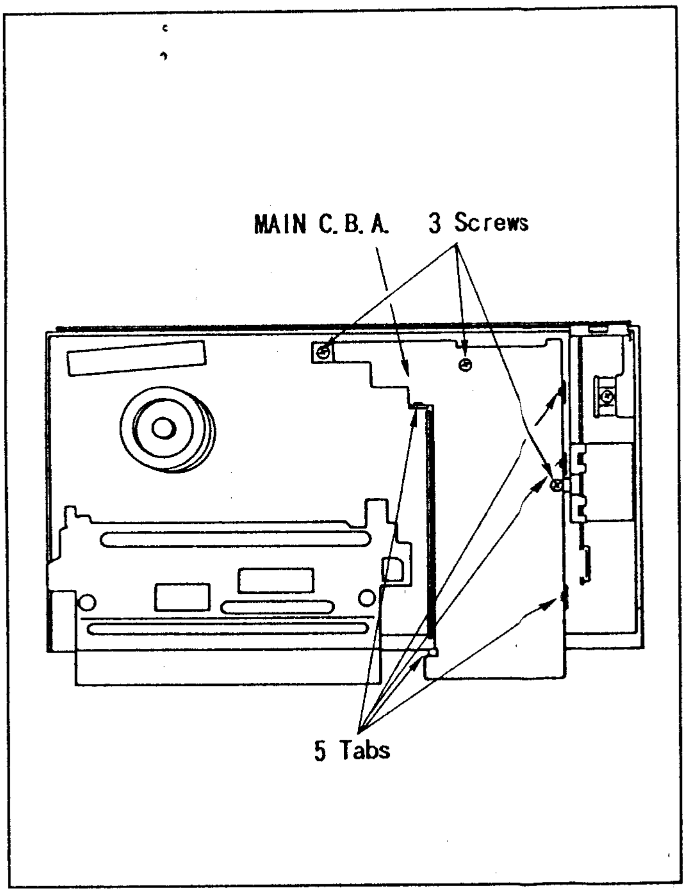

MAIN C.B.A.
3 Screws
5 Tabs

Fig. V2

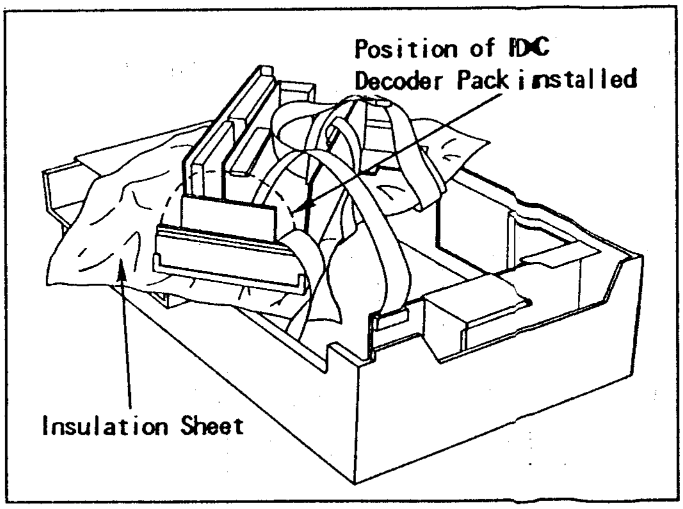
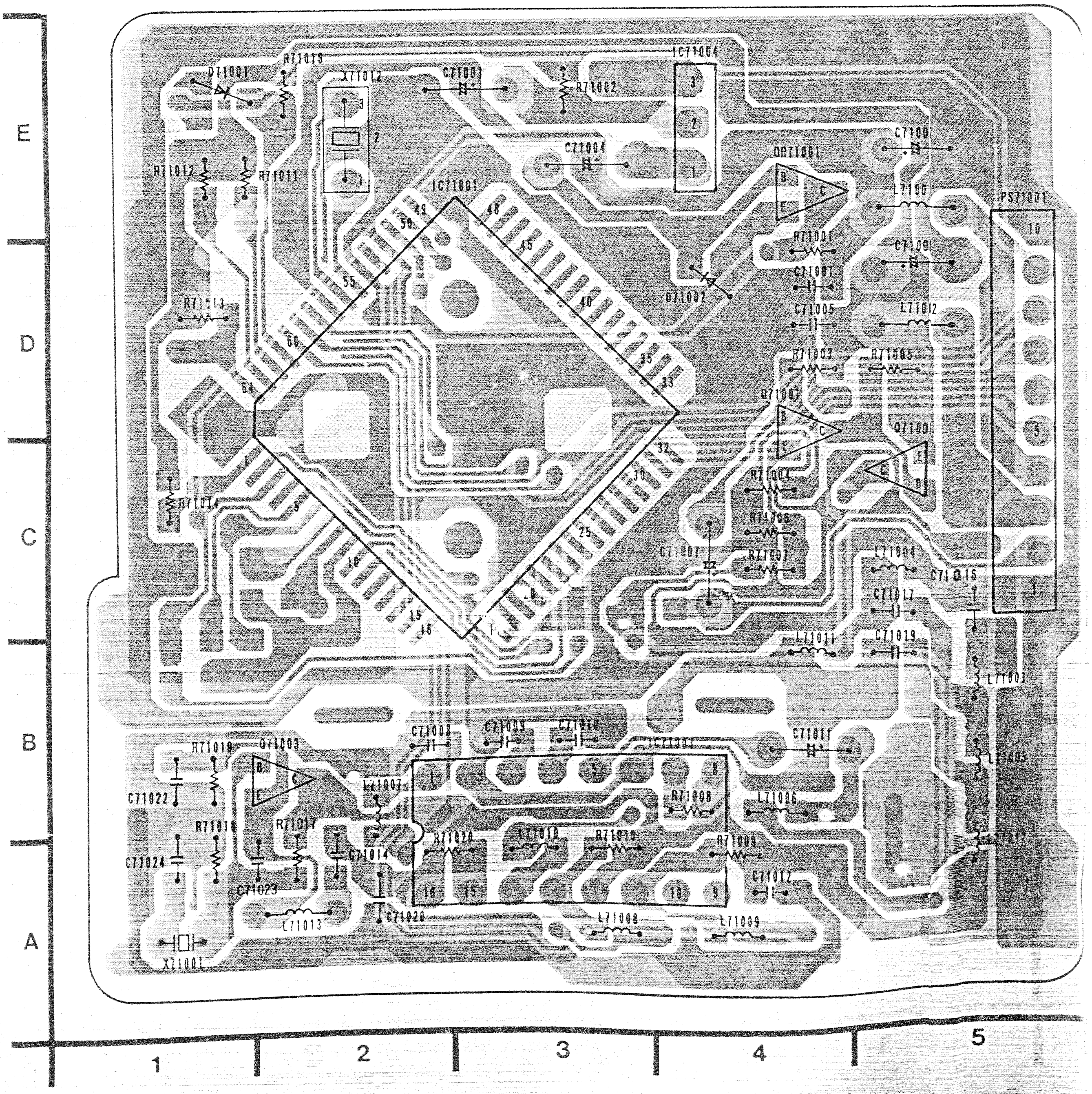

Position of PDC Decoder Pack installed
Insulation Sheet

Fig. V3

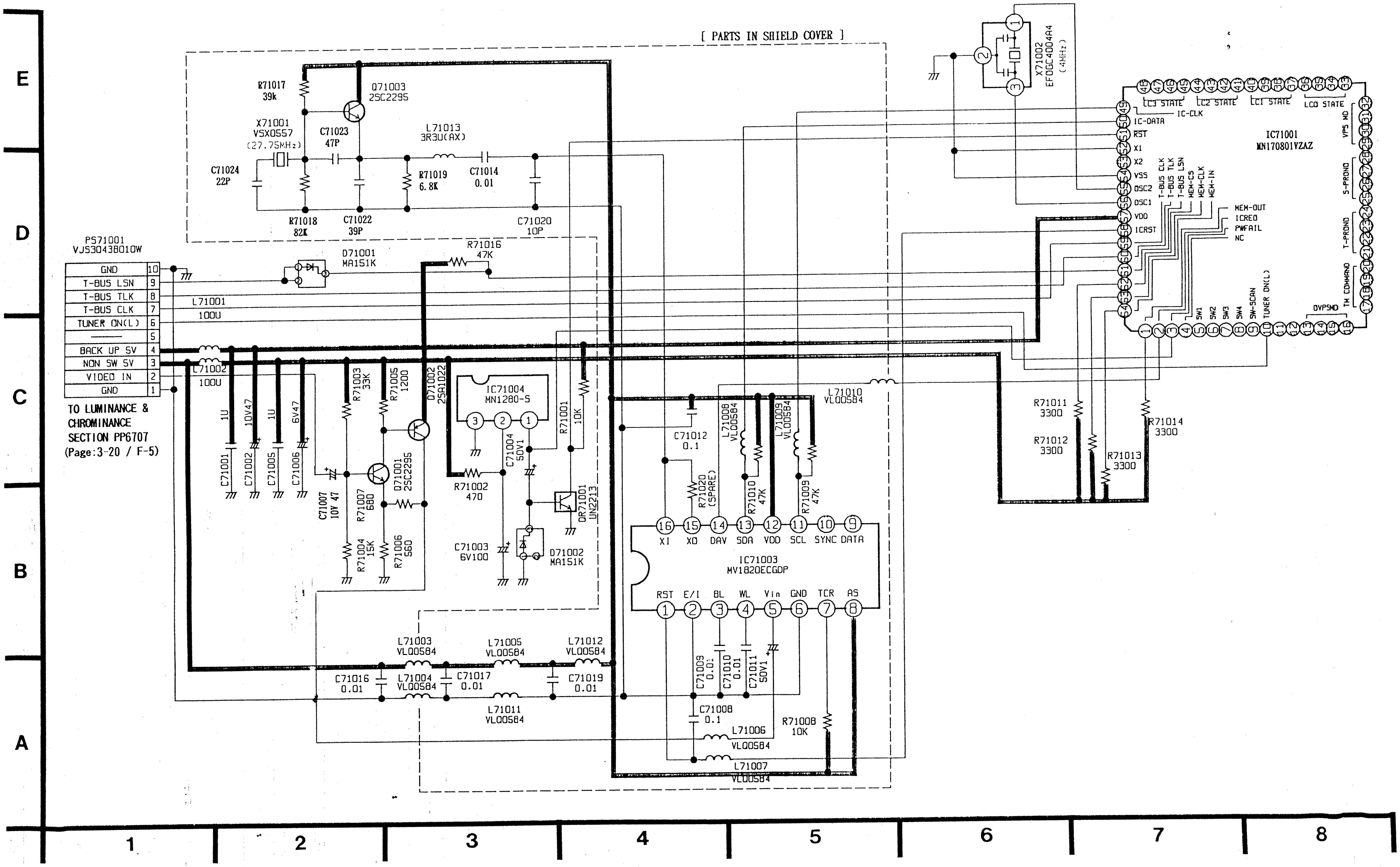
5-2.VW-PDC1E C.B.A. (VEP07709A)

PDC PACK C.B.A.			
Transistor		Integrated Circuit	
Q71001 Q71002 Q71003	D-4 C-5 B-2	IC71001 IC71003 IC71004	E-2 B-3 E-4
Transistor & Resistor		Connector	
QR71001	E-4	PS71001	D-5

ADDRESS INFORMATION


E
D
C
B
A
1
2
3
4
5
D71001
R71016
X71012
C71003
R71002
IC71004
C71001
QR71001
C71004
R71012
R71011
IC71001
L71001
PS71001
R71001
Q71002
R71013
R71003
R71005
L71012
Q71001
R71014
R71004
R71006
R71007
C71007
L71004
C71015
C71017
L71011
C71019
L71003
L71005
Q71003
R71019
C71022
C71008
C71009
C71010
IC71003
C71011
L71007
R71008
L71006
R71010
R71017
C71014
R71020
L71010
R71015
R71009
C71024
C71023
C71012
L71013
C71020
L71008
L71009
X71001

5-3.VW-PDC1E SCHEMATIC DIAGRAM


E
D
C
B
A
1
2
3
4
5
6
7
8
[PARTS IN SHIELD COVER]
R71017 39k
Q71003 2SC2295
X71001 VSX0557 (27.75MHz)
C71023 47P
L71013 3R3U(AX)
C71024 22P
R71019 6.8K
C71014 0.01
R71018 82K
C71022 39P
C71020 10P
PS71001 VJS3043B010W
GND 10
T-BUS LSN 9
T-BUS TLK 8
T-BUS CLK 7
TUNER ON(L) 6
5
BACK UP SV 4
NON SW SV 3
VIDEO IN 2
GND 1
TO LUMINANCE & CHROMINANCE SECTION PP6707 (Page:3-20 / F-5)
D71001 MA151K
R71016 47K
L71001 100U
L71002 100U
C71001 1U
C71002 10V47
C71005 1U
C71006 6V47
R71003 33K
R71005 1200
Q71002 2SA1022
IC71004 MN1280-S
R71001 10K
C71007 10V 47
R71007 680
Q71001 2SC2295
R71004 15K
R71006 560
R71002 470
C71004 50V1
C71003 6V100
D71002 MA151K
QR71001 UN2213
C71012 0.1
L71008 VLQ0584
L71009 VLQ0584
L71010 VLQ0584
R71020 (SPARE)
R71010 47K
R71009 47K
IC71003 MV1820ECGDP
X1 XO DAV SDA VDD SCL SYNC DATA
RST E/I BL WL Vin GND TCR AS
L71003 VLQ0584
L71005 VLQ0584
L71012 VLQ0584
C71016 0.01
L71004 VLQ0584
C71017 0.01
C71019 0.01
L71011 VLQ0584
C71009 0.01
C71010 0.01
C71011 50V1
C71008 0.1
L71006 VLQ0584
L71007 VLQ0584
R71008 10K
X71002 EFOGC4004A4 (4MHz)
IC71001 MN170801VZAZ
LC3 STATE
LC2 STATE
LC1 STATE
LC0 STATE
IC-CLK
IC-DATA
RST
X1
X2
VSS
OSC2
OSC1
VDD
ICRST
T-BUS CLK
T-BUS TLK
T-BUS LSN
MEM-CS
MEM-CLK
MEM-IN
MEM-OUT
ICREO
PWFAIL
NC
SW1
SW2
SW3
SW4
SW-SCAN
TUNER ON(L)
OVPSMD
TM COMMAND
T-PROND
S-PROND
VPS MD
R71011 3300
R71012 3300
R71013 3300
R71014 3300

5-4.VW-PDC1E PARTS LIST

Note:1.Be sure to make your orders of replacement parts according to this list.
2.IMPORTANT SAFETY NOTICE : Components identified with the mark ⚠ have the special characteristics for safety. When replacing any of these components,use only the same type.
3.Unless otherwise specified,
All resistors are in OHMS , K=1,000 OHMS. All capacitors are in MICRO-FARADS(uf),P=uuF.
4.The P.C.Board units marked width'■'show below the main assembled parts.
5.The marking(RTL) indicates the retention time is limited for this item. After the discontinuation of this assembly in production, it will no longer be available.

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
		VPK1591	BOX	1	
		VQT5350	OPERATING INSTRUCTIONS	1	
			(ENGLISH/GERMAN/FRENCH/		
			SWEDISH/FINNISH/DUTCH/		
			ITALIAN/SPANISH)		

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
		VEP07709A	PDC C.B.A.	1	(RTL)
	■	VEP07709A	PDC C.B.A.		(RTL)
C71001		ECUM1C105ZFN	C.CAPACITOR 16V 1U	1	
C71003		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C71004		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C71005		ECUM1C105ZFN	C.CAPACITOR 16V 1U	1	
C71007		ECEA1AKN470	E.CAPACITOR 10V 47U	1	
C71008		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C71009,10		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C71011		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C71012		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C71014		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C71016,17		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C71019		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C71020		ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C71022		ECUM1H390JCN	C.CAPACITOR CH 50V 39P	1	
C71023		ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C71024		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
D71001,02		MA151K	DIODE	2	
IC71001		MN170801VZAZ	IC	1	
IC71003		MV1820ECGDP	IC	1	
IC71004		MN1280S	IC	1	(S)
L71001,02		VLQ0188J101	COIL 100UH	2	
L71003-12		VLQ0584	TRANSFORMER	10	
L71013		VLQ0188J3R3	COIL 3.3UH	1	
PS71001		VJS3043B010W	CONNECTOR (FEMALE)	1	
Q71001		2SC2295	TRANSISTOR	1	
Q71003		2SC2295	TRANSISTOR	1	
QR71001		MRN1404	TRANSISTOR-RESISTOR	1	
R71001		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R71002		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R71003		ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	
R71004		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R71005		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R71006		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R71007		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R71008		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R71009,10		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	2	
R71011-14		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	4	
R71016		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R71017		ERJ6GEYJ393	M.RESISTOR CH 1/10W 39K	1	
R71018		ERJ6GEYJ823	M.RESISTOR CH 1/10W 82K	1	
R71019		ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	1	
X71001		VSX0557	CRYSTAL OSCILLATOR	1	

INTERNAL REFERENCE CODES

NOTE: This chart is only for internal reference.
Do not order any parts according to these codes.

P. C. B.	FILM CODE
MAIN	FUTM00-06954
POWER	FUTM00-01583
TV DEMODULATOR PACK (NV-SD22EG/EO, 25EG/EO)	FUTM00-07749
TV DEMODULATOR PACK (NV-SD25B)	FUTM01-07645
HEAD AMP	FUTM00-05200
LUMINANCE & CHROMINANCE PACK	FUTM01-003A59
VPS PACK (NV-SD22EG, 25EG)	FUTM01-07575
OPERATION	FUTM00-07761
MECHANISM CONNECTION	FUTM02-00S63
PDC PACK (OPTION) (NV-SD22EO, SD25EO/B)	FUTM00-07709